



CRMC Narrative

"EAST POINT"

Proposed Multifamily Development

Map 203 Block 1 Lot 4

Map 303 Block 13 Lots 4 & 5

Roger Williams Avenue

East Providence, RI

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TABLE OF CONTENTS

1.0 SITE INTRODUCTION AND PROJECT SCOPE..... 3

1.1 SITE LOCATION 3

1.2 BACKGROUND 3

1.3 PRESENT SITE CONDITIONS 4

1.4 PROPOSED IMPROVEMENTS 6

2.0 COASTAL AND WETLANDS FEATURES PROTECTED BY THE STATE..... 9

2.1 OMEGA POND AND FRESHWATER WETLANDS..... 9

2.2 SEEKONK RIVER AND ASSOCIATED COASTAL FEATURE..... 9

3.0 URBAN COASTAL GREENWAYS FOR THE METRO BAY REGION REGULATIONS 10

3.1 SECTION 5.5.1.A: STANDARDS APPLICABLE TO ENTIRE DEVELOPMENT 10

3.2 SECTION 5.5.1.B: URBAN COASTAL GREENWAY ZONES..... 11

3.3 SECTION 5.5.1.C: GENERAL STANDARDS FOR URBAN COASTAL GREENWAYS 11

3.4 SECTION 5.5.1.D: VEGETATION STANDARDS FOR ALL URBAN COASTAL GREENWAYS 12

3.5 SECTION 5.5.1.E: PUBLIC ACCESS STANDARDS FOR ALL URBAN COASTAL GREENWAYS 15

3.6 SECTION 5.5.1.F: STORMWATER STANDARDS FOR ALL URBAN COASTAL GREENWAYS 15

3.7 SECTION 5.5.1.G: STRUCTURAL PROTECTION STANDARDS FOR UCG 16

3.8 SECTION 5.5.1.H: PROHIBITIONS 16

3.9 SECTION 5.12: BROWNFIELD REDEVELOPMENT WITHIN THE METRO BAY REGION 17

3.10 SECTION 5.13: COMPENSATION OPTIONS FOR UCG REQUIREMENTS 17

3.11 SECTION 5.14: UCG MANAGEMENT AND MAINTENANCE REQUIREMENTS..... 17



- APPENDIX A PROOF OF OWNERSHIP
- APPENDIX B LIST OF ABUTTERS
- APPENDIX C CRMC PRELIMINARY DETERMINATION
- APPENDIX D CITY OF EAST PROVIDENCE BUILDING OFFICIAL LETTER
- APPENDIX E PUBLIC ACCESS PLAN
- APPENDIX F PHOTOS
- APPENDIX G ELUR DECLARATIONS
- APPENDIX H UCG MANAGEMENT PLAN
- APPENDIX I WETLAND BIOLOGIST NARRATIVES
- APPENDIX J UCG EASEMENT PLANS AND DRAFT DOCUMENTATION
- APPENDIX K CRMC VARIANCE CRITERIA MEMORANDUM
- APPENDIX L BARGE REMOVAL MEMORANDUM
- APPENDIX M OLRSM letters of COMPLIANCE
- APPENDIX N PROPOSED AMENITIES MEMORANDUM
- APPENDIX O RIHPHC LETTER OF NO OBJECTION
- APPENDIX P CANOE/KAYAK LAUNCH INSIGNIFICANT ALTERATION PERMIT





1.0 SITE INTRODUCTION AND PROJECT SCOPE

1.1 SITE LOCATION

The parcels that are the subject of this application are generally located southwest of the intersection of Bourne and Roger Williams Avenues and more specifically identified as East Providence Tax Assessor's Map 303, Block 13 Parcel 4 and 5, Map 203, Block 1, Parcel 4, and Map 304, Block 1 Parcel 8 (collectively referred to as the "Property" or the "Site"). The Property consists of approximately twenty-seven (27+/-) acres and is separated into three distinct plats of land by an existing pond and a rail line property owned by the State of Rhode Island Department of Transportation ("RIDOT"). The RIDOT land is used by Genesee & Wyoming, Inc. ("G&W") but is owned by the State. The Site area east of the railroad tracks, which abuts Roger Williams and Bourne Avenues, contains approximately 8.3 acres and is referred to as the "Pond Side" section of the project (Map 303, Block 13, Parcels 4 and 5). The 18.8 acres located west of the tracks is called the "Coastal Side" section of the development (Map 203, Block 1, Parcel 4).

Directly abutting the Pond Side development section to the south lies Omega Pond, a freshwater pond that flows west over the Omega Dam, spilling into the Seekonk River on which the Coastal Side development section fronts. Immediately north of the Coastal Side lies the commercial/industrial property called "Phillipsdale Landing." The Pond Side section is abutted by both residential and commercial uses along Bourne and Roger Williams Avenues.

1.2 BACKGROUND

For over a century, the site was the location of heavy industrial uses, including the former Washburn Wire Company and Ocean State Steel operations. All structures and improvements were removed and the Site was environmentally remediated by a previous developer. The first action involved the demolition, asbestos abatement and removal of the structures on the site. After all necessary permits were obtained (Assent 2003-10-059), this work commenced in early February 2004 and ended in the second quarter of that same year. See photo on the following page of pre-remediation site conditions.

Remediation activities included sampling and treatment of soils, and the transportation of some of those soils (over 34,000 tons) to the state landfill and other authorized off-site disposal locations. The site remediation was conducted in accordance with a Remedial Action Work Plan that RIDEM approved in April 2004. This remediation plan was approved by the Rhode Island Coastal Resources Management Council (CRMC) under CRMC Assent 2004-03-044. The treatment, removal and disposal of the contaminated soils, as well as the filling of excavations and re-grading of the site, were completed in 2004 and 2005.

Three Environmental Land Use Restriction (ELUR) areas are now present on the Site. Two of these areas are located on the Coastal Side of the Site and contain excavated soil that RIDEM allowed to remain. The third area is located on the Pond Side adjacent to an electric transmission tower and also contains excavated soil. These ELUR areas are shown on the plans accompanying this Application, and a copy of the recorded ELUR Declaration is attached hereto as Appendix G.

Most recently, a Preliminary Determination (PD) was issued by CRMC (CRMC file # 2021-01-027) which included a rendition of the proposed project. The current project incorporates much of the staff concerns and comments in the PD, which can be found in Appendix C.



1.3 PRESENT SITE CONDITIONS

Currently, access from the abutting roadways to the Pond Side of the Site is controlled by way of two locked gates: one on Roger Williams Avenue and one on Bourne Avenue. The two development sections (Coastal and Pond) are currently connected by an "at grade" crossing of the P&W railroad tracks. An existing access easement provides access to the Coastal Side running south from Bourne Avenue at the Phillipsdale Landing property entrance across its property to a gate at the subject site; however, the proposed use of this easement will only be for emergency access following site development. Aerial electric wires cross the Pond Side running north to south parallel to the railway. Smaller scale, aerial services run from Roger Williams Avenue along the pond edge to the Coastal Side. A large diameter sewer force main operated by the Narragansett Bay Commission runs north to south parallel to the rail line and the overhead lines, then running under Omega Pond.

Minimal natural vegetation is present on the Property, most of which is located along the perimeter edges and along the abutting waterways. The edge of the freshwater wetland vegetation associated with Omega Pond was delineated by Natural Resource Services in October of 2020 (see section 2.1). Disused concrete

structures are located at the water edge. At the northeast corner of the pond, a municipal drainage outfall directly discharges stormwater from urban areas to the east of the Site. Omega Pond is associated with a TMDL for fecal coliform, dissolved oxygen, cadmium, aluminum and phosphorus.

The Coastal Side has approximately 2,000 feet of frontage on the Seekonk River, a CRMC Type 4 water. There are no structures located here, although some areas of crumbling pavement and concrete remain as evidence of the previous occupants of the Site. The coastal feature associated with the adjacent waterway is the top of the manmade fill slope per the most recent Preliminary Determination. The slope drops down to a deteriorated wooden bulkhead at the water line, and in one area, to a small area of vegetated coastal wetland. The coastal feature was delineated by Mason & Associates, Inc. in November of 2020 (see section 2.2). A rusting abandoned barge is located at the western tip of the Site and the remains of a wooden piling system run along the shoreline to the north. This section of the Seekonk River is considered an impaired waterway. The 303(d) list of impairments includes fecal coliform, dissolved oxygen and nitrogen.



In general, the site slopes away from the abutting municipal roadways and towards Omega Pond and the Seekonk River. The majority of the site slopes gently, with the exception of several sections of steep slopes on the Coastal Side of the project where former improvements existed, and steep slopes at the edges of the abutting water features. The primary soil type on site is Ur (Urban land) as designated by the USDA Natural Resource Conservation Service. This is generally a type C hydrologic soil. A smaller area of land at the tip of the coastal side of the project has been identified as FtA (Fortress) This is generally a type A hydrologic soil. Class IV soil evaluations performed on site in 2005 revealed primarily fills and silts, with inconclusive seasonal high groundwater tables. Soil borings performed in 2004 reveal fills, silts, and sands with a 7.5 to 12-foot depth to water. It is likely that the areas adjacent the shorelines are tidally influenced given the steep coastal slopes.

1.4 PROPOSED IMPROVEMENTS

Noble Development LLC, the "Applicant", proposes to revitalize the Site to create "East Point", a vibrant and dynamic residential community which will create much needed housing for renters and buyers alike in the Greater Providence market, while simultaneously providing desirable public access to the waterfront area.

Phasing:

The entire East Point project is projected to contain three hundred fifty (350) units, two hundred ten (210) of which will be located on the Coastal Side and one hundred forty (140) on the Pond Side. The property is being purchased from the City in two phases over 18 months. The Coastal Side will be developed as Phase 1 and will likely take four (4) years to build all the units. The Pond Side will be acquired within a year or so thereafter, and will be the second phase. Phase 2 will begin construction within two (2) years of the initial acquisition and likely take four (4) years start to finish to complete the buildout. The overall duration of the project is therefore estimated to take seven (7) years.

Unit Style:

East Point will have various style and size residential units similar to the Developer's recent project, Kettle Point. Units will range from 1-, 2- and 3-bedroom rental apartments with gym and pool amenities, to single family style units that are designed on pier foundations, given that a significant portion of the property is in the V zone flood plain. A various assortment of single level condominiums geared toward an older buyer demographic and three (3) level townhouse units geared toward a younger demographic will be offered as well.

Pond Side Development:

The Pond Side of the project will be graded evenly down from the abutting roadways to the pond. A 30-foot-wide main entrance roadway will be run from the approximate location of the existing entrance gate, parallel the pond edge, to the at grade railroad crossing. This existing rail crossing will be ungraded appropriately for safety while allowing for continued operation of the rail. Three apartment structures are proposed to the north of this roadway, supported by a large surface parking lot and several small single story garage structures. Situated between the apartments and the roadway, and fronting a small area of grassed open space, three townhouse buildings are proposed. The existing overhead electrical lines and the sewer force main which cross this side of the project are all to remain. The concrete structures along the pond edge are to structures be removed and disposed of at a licensed off-site facility. The ELUR area on this side of the project is to remain with minimal disturbance.

Between the main entrance road and the pond, the Applicant has proposed stormwater quality controls, public access parking, and an urban coastal greenway. This greenway has been developed under guidance from the Urban Coastal Greenway Design Manual for the Metro Bay Region Special Area Management Plan (UCG). This greenway includes walkways, trails, and pedestrian seating areas. The Greenway will be revegetated with a mixture of native trees, shrubs, and coastal meadow grasses providing improved habitat for local wildlife. All proposed roadways and surface parking areas will be planted with a mixture of shade and ornamental and/or flowering trees and evergreen buffer plantings where appropriate to provide shading of paved areas, enhance and accent the proposed architecture of the site, buffer views of any outdoor utility and/or service areas, and enhance the experience of residents and visitors.

Coastal Side Development:

The main entrance road runs from the railway crossing to the west, terminating in a public access parking lot and a coastal promenade overlook. This public parking is located on top of one of the ELUR areas; however, the underlying contaminated material will not be disturbed. From this main road, two residential access roads loop to the north and to the south. Various styles of single and multifamily structures are located along these roadways. On the eastern boundary of the Coastal Side, a large apartment structure overlooks the River. The associated parking lot is situated between the structure and the railway, and will be planted with a mixture of shade and ornamental trees to help shade the parking area and accentuate the architecture of the structure. Evergreen buffer plantings will also be provided to minimize views of the parking area from proposed roadways and residences, and suitably buffer views of the abutting railway. The emergency access through the northerly abutter connects to the main roadway with additional surface parking. Within the looping residential access road that runs parallel to the coastline, a multi-use grassed open space area will be provided. This open space is located over the second coastal ELUR area which will also not be disturbed and will include an overlook seating area providing views of the adjacent Seekonk River.

Between the coastal access road contaminated and the river's edge, the Applicant has proposed stormwater quality controls, public access parking, and an urban coastal greenway. This greenway has also been developed under guidance from the Urban Coastal Greenway Design Manual for the Metro Bay Region Special Area Management Plan (UCG). This greenway includes walkways, trails, and pedestrian seating areas. It also will include future interpretive signage panels and sculptural elements to provide additional educational and artistic interest to the greenway for the public. It will be vegetated with a mixture of native trees, shrubs, and coastal meadow grasses. The meadow areas will consist of plants suitable for use in the proposed bioretention areas and to help visually and ecologically connect the bioretention into the greater landscape of the greenway. The rusting barge is to be removed, along with the wooden pilings from the former pier. The wooden bulkhead is to remain largely undisturbed

All proposed roadways and surface parking areas will be planted with a mixture of shade and ornamental and/or flowering trees and evergreen buffer plantings where appropriate to provide shading of paved areas, enhance and accent the proposed architecture of the site, buffer views of any outdoor utility and/or service areas, and enhance the experience of residents and visitors.

Utilities:

The proposed development will be supported by the surrounding municipal and private utility infrastructure. A new 8-inch municipal water main will be proposed from Roger Williams Avenue under the main access road, running under the railway crossing, and looping throughout the residential access roads. On the Pond Side of the project, this water main will also loop northward to the main in Bourne Avenue. A gravity sewer collection system is proposed on the coastal side of the project which will route wastewater to a centralized sewer pump station. This pump station will convey wastewater under the rail crossing to a new sewer manhole adjacent to Roger Williams Avenue, which will then gravity flow into the existing municipal main. The residential townhouses on the Pond Side of the project will be provided with a second, smaller, pump station which will tie into the larger coastal side pressurized main for disposal of wastewater. The apartment structures on the pond side will tie directly into municipal sewer mains on the adjacent public roadways. With permission from National Grid, electrical distribution will be routed from existing overhead lines to a centralized transformer and then on to the individual structures.

Stormwater:

Stormwater Management will be provided in accordance with the codified Rhode Island Stormwater Design and Installation Standards, the Coastal Resources Management Program, the Urban Coastal Greenway Design Manual, and the Metro Bay Region SAMP. Management will focus on providing varied low impact stormwater quality devices to treat runoff from developed areas. An effort to blend the visual impact of the stormwater devices with the vegetated coastal areas in an aesthetically appropriate manner will be made.

Coastal Side:

On the Coastal Side of the development, a conventional system of roadway catch basins will manage the majority of the stormwater generated from the site. Deep sumps will be provided on all off-line catch basins, while standard sumps will be included on all other structures. This drainage system will convey stormwater to two wide vegetated swales within the UCG. These swales are to be planted with species suitable for stormwater systems and for coastal areas. The species selected will also help visually and ecologically connect the bioretention into the greater landscape of the greenway. The swales are shallow and wide in order to minimize flow velocities and potential erosion. Earthen check dams provide pretreatment storage volume in these devices. An additional component of pretreatment is provided in a sediment forebay located downstream of the large vegetated public space over one of the ELUR areas. The vegetated swales flow into a large sand filter basin at the southwest tip of the development. This BMP will provide the majority of the water quality for this side of the development. Runoff passing through the filter media will be infiltrated into the sandy soils below. Overflow water from this device will flow over two large spillways to the coast. The substantial width of the devices reduces flow velocities in order to minimize any potential erosion. The public access walkway passes safely over these two spillways.

At the north end of the Coastal Side, a second smaller stormwater system manages the remainder of the flow from this project. This system includes a third shallow vegetated swale with check dam pretreatment volume, running to a small bioretention filter at the northwest corner of the Site. This device provides water quality for a small portion of a private roadway and several of the adjacent structures. This bioretention filter overflows over a concrete weir and down to the coast.

Pond Side:

On the Pond Side of the development, the stormwater is again primarily managed by a conventional system of concrete inlet structures. A shallow grassed swale running adjacent to the railway conveys a remaining component of the runoff. These devices run to a bioretention filter located within the UCG. A preceding diversion structure routes low-flow stormwater through a large hydrodynamic separator located adjacent to the roadway. High flow water bypasses the separator and the filter and runs directly to Omega Pond through a new outfall pipe.

In keeping with the overall landscape aesthetic and habitat for the development, the proposed bioretention filter and surrounding landscape will be planted with a mixture of coastal meadow grasses and native trees and shrubs to visually and ecologically incorporate it into the surrounding landscape.

A small component of runoff from grassed lawns is to be captured by yard drains and conveyed to an existing municipal drain line that runs through the corner of the property. This municipal line also discharges into Omega Pond through an existing 42-inch outfall.

2.0 COASTAL AND WETLANDS FEATURES PROTECTED BY THE STATE

2.1 OMEGA POND AND FRESHWATER WETLANDS

The delineation of this feature was performed by Natural Resource Services, Inc. (NRS) in October of 2020. Per their provided report, this field work conformed to the policies and definitions for the identification of physiographic features found in the RI Coastal Resources Management Program (CRMP) (650 RICR-20-00-01). Additionally, the wetland delineation was established in accordance with the standards outlined in Appendix 2 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (250 RICR 150-15-1). These land-use regulations are administered by the RI Department of Environmental Management (DEM), Office of Water Resources (OWR).

Per the NRS report, the extent of Omega Pond and the associated wetlands were delineated with flagging labeled A1-A33. These flags define the limit of the pond as classified under the DEM regulations. Ponds require the application of a 50-foot perimeter wetland. This is an adjacent upland area considered to be important to the protection of the wetland. In addition to the coastal flagging, NRS also identified an osprey nest in the vicinity. The existing Osprey Pole adjacent to Omega Pond will need to be removed and relocated as part of this application in order to complete necessary site work and proposed grading operations to construct proposed stormwater management and public access improvements. Nesting activities will be reviewed prior to proposed site work to ensure minimization of disturbance to wildlife.

Refer to the original NRS report and the accompanying figures in Appendix I.

2.2 SEEKONK RIVER AND ASSOCIATED COASTAL FEATURE

The delineation of this feature was performed by Mason & Associates, Inc. (M&A) in November of 2020. Per their provided report the investigation of the coastal wetlands was performed in accordance with the CRMP. The western and southern boundaries of the Coastal Side of the project are adjacent to the Seekonk River, identified as a CRMC Type 4 water. The coastal wetland delineation, represented by flag series CF1-CF33, consists of a man-made shoreline and top of manmade fill slope. The report identified that the entire property and coastal feature were subject to development and demolition activities. In general, the coastal feature classified in various parts as top of concrete wall and top of manmade fill slope (bluff). At one location, the slope drops down to a coastal vegetated marsh dominated by hightide brush and panic grass.

Refer to the original M&A report and the accompanying figures in Appendix I.

3.0 URBAN COASTAL GREENWAYS FOR THE METRO BAY REGION REGULATIONS

The UCG Regulations classify the project site as a Development Zone. As the project is to be reviewed in its totality by the CRMC, these regulations have been applied to both sides of the project. The proposed project is subject to and consistent with all applicable goals, policies and regulations of the Urban Coastal Greenways for The Metro Bay Region ("UCG") Regulations as follows:

3.1 SECTION 5.5.1.A: STANDARDS APPLICABLE TO ENTIRE DEVELOPMENT

Since an Urban Coastal Greenway is part of the project, the applicant shall grant an easement to the RICRMC for the UCG area and public access pathways which shall be recorded in the land evidence records of the City of East Providence.

- (a) 15% Minimum Vegetation Requirement: The Applicant has included substantially landscaped areas within the proposal to achieve well over 15% vegetative coverage. This vegetation requirement is met through a combination of the UCG and additional plantings elsewhere on the property. The planting plans have been prepared by a Rhode Island licensed landscape architect. The landscape plan uses an appropriate mix of Native and/or Naturalized groundcovers, grasses, shrubs, and trees to achieve the goals of these regulations. No invasive vegetation will be utilized. The vegetated area includes landscaping elements of vegetated swales, grassed stormwater sand filters, and vegetated bioretention filters. Within the UCG, the plantings include an appropriate mix of native trees, shrubs, coastal meadow grasses, and ground covers, with minimal use of high maintenance lawn sods and grasses.
- (b) Stormwater Management: The development proposal meets the requirement of 100% on-site management of stormwater as required by RICRMP Section 1.3.1.F, and as specified in the most recent edition of the *Rhode Island Stormwater Design and Installation Standards Manual* to improve water quality. As all stormwater flow is either to tidal waters to high order bodies of water which overflow into tidal waters, the management of peak rate and volume runoff was not a concern of the proposed design. The LID techniques of vegetated dry swales, stormwater filtration basins, and structural pre-treatment devices, have been incorporated to the maximum extent practicable.
- (c) Public Access: The applicant has provided alongshore and arterial public access pathways where none lawfully existed before within the development site, as described in UCG Section 150.5; however, relief from the in the required width of 8 feet is requested. The applicant has provided pathways with a width of 5 feet.
- (d) Construction Setback: On the coastal side of the development, the applicant provides the full 25-foot setback from the coastal green way to all new residential structures and improvements. As the design intent was to locate the main entrance in the same location as the existing site entrance and driveway, the applicant is unable to provide the full construction setback on the Pond side of the development. All areas between the main entrance drive and the pond are designated as public access, or is part of the 50-wide UCG. All private Pond side structures and access are located well outside the 25-foot construction setback zone.

The applicant requests relief from the construction setback requirements as noted above. Given the design of the proposed UCG greenway, the requested reduction in the setback requirement should be considered under Section 5.5.2.A.d.2 because it has demonstrated that the project and its subsequent use and maintenance will not result in the privatization of, or preclude public use of, the UCG.

- (e) Project Illumination: All exterior light fixtures shall use shielding and glare control devices to shield surrounding areas from excessive light trespass and glare.

3.2 SECTION 5.5.1.B: URBAN COASTAL GREENWAY ZONES

The UCG Regulations classify the project site as a Development Zone. The project has selected buffer zone/greenway Option 3 which calls for a Compact UCG width of 50 feet. UCG standards are applicable to all activities that meet the regulatory thresholds specified in UCG Section 5.5.C. The applicant provides compensation due to the proposed reductions in the standard UCG, as described in UCG Section 5.13.

3.3 SECTION 5.5.1.C: GENERAL STANDARDS FOR URBAN COASTAL GREENWAYS

The Urban Coastal Greenway begins at the inland edge of the coastal feature. The coastal feature, the applicable UCG area, and construction setback have been clearly delineated on the site plans submitted for review to the RICRMC. The boundaries of the Urban Coastal Greenway easements (see Appendix J) are/ will be marked on all plans used for planning, permitting, and during construction. Additionally, the public access paths and other public amenities have been clearly delineated on site plans submitted for review to the RICRMC. The UCG shall have appropriate signage approved by the RICRMC and the City of East Providence, and its inland limits shall be marked on-site by permanent markers.

In the interest of public safety, the project design facilitates the unobstructed observation of public spaces. On the Coastal side, the design provides four (4) access routes in the form of ramps and paths into the UCG which provide pedestrians with a sense of direction while giving them some visible indication as to where access is encouraged or restricted, while providing a minimum number of access routes which allows users some flexibility in movement. Emergency access to public spaces and areas is provided from the coastal roadway loop via pedestrian pathways. On the Pond side of the project, the UCG can be accessed by two (2) points along the roadway adjacent sidewalk, and the public parking area. The project design uses shrubbery, coastal meadow grasses, and low-level plantings where appropriate adjacent to footpaths and appropriately spaced trees to provide visual interest and habitat while maintaining appropriate and safe view corridors to the coastline from proposed residential structures, access roadways, and public overlook/access areas. The design ensures access opportunities that enhance and complement shoreline observation opportunities and provides access for maintenance of stormwater treatment measures. The project shall be consistent with applicable municipal requirements in order to ensure ease of access for emergency services.

The Urban Coastal Greenway shall be dedicated for public use by way of a Conservation Easement granted to the CRMC that runs with the land and shall be recorded as such in the land evidence records of the City of East Providence.



3.4 SECTION 5.5.1.D: VEGETATION STANDARDS FOR ALL URBAN COASTAL GREENWAYS

- (a) The entirety of the Urban Coastal Greenway (UCG) has been designed to be vegetated with the exception of approved public access pathways (as described in UCG Section 5.5.1.E). The UCG shall be wholly vegetated and maintained with native plant communities and/or sustainable landscapes consisting of a mixture of coastal grasses, groundcover, shrubs, and trees, including:

Coastal Side:

Evergreen Trees:

Ilex opaca (American Holly)
Pinus rigida (Pitch Pine)
Juniperus virginiana (Eastern Red Cedar)
Thuja plicata (Western Red Cedar)

Shade Tree Plantings:

Acer rubrum (Red Maple)
Nyssa sylvatica (Tupelo)
Quercus alba (White Oak)
Quercus palustris (Pin Oak)

Flowering/Ornamental Tree Plantings:

Amelanchier 'Autumn Brilliance' (Autumn Brilliance Shadblow)
Betula populifolia 'Whitespire' (Whitespire Birch)
Magnolia virginiana (Sweetbay Magnolia)
Prunus serrulata 'Kwanzan' (Kwanzan Cherry)

Mixed Shrub Border Plantings:

Clethra alnifolia (Summersweet)
Cornus sericea (Redtwig Dogwood)
Hydrangea arborescens (Smooth Hydrangea)
Hydrangea paniculata (Panicled Hydrangea)
Ilex glabra (Inkberry)
Ilex verticillata (Winterberry)
Myrica pensylvanica (Bayberry)
Viburnum dentatum (Arrowwood)

Coastal Grasses:

Panicum virgatum (Switchgrass)
Shizachyrium scoparium (Little Bluestem)





Pond Side:

Evergreen Trees:

Ilex opaca (American Holly)
Picea glauca (White Spruce)
Pinus strobus (White Pine)
Juniperus virginiana (Eastern Red Cedar)
Thuja plicata (Western Red Cedar)

Shade Tree Plantings:

Acer rubrum (Red Maple)
Betula nigra 'Dura-Heat' (Dura-Heat)
Fagus grandifolia (American Beech)
Liriodendron tulipifera (Tulip Tree)
Nyssa sylvatica (Tupelo)
Quercus alba (White Oak)
Quercus palustris (Pin Oak)

Flowering/Ornamental Tree Plantings:

Betula populifolia 'Whitespire' (Whitespire Birch)
Cercis canadensis (Eastern Redbud)
Chionanthus virginicus (Eastern Fringe Tree)
Magnolia virginiana (Sweetbay Magnolia)
Prunus serotina (Black Cherry)

Mixed Shrub Border Plantings:

Calycanthus floridus (Carolina Allspice)
Clethra alnifolia (Summersweet)
Cornus sericea (Redtwig Dogwood)
Hydrangea arborescens (Smooth Hydrangea)
Hydrangea paniculata (Panicled Hydrangea)
Ilex glabra (Inkberry)
Ilex verticillata (Winterberry)
Myrica pensylvanica (Bayberry)
Vaccinium corymbosum (Highbush Blueberry)
Viburnum dentatum (Arrowwood)
Viburnum plicatum 'Tomentosum' (Doublefile Viburnum)
Viburnum trilobum (American Cranberry Bush)

Coastal Grasses:

Panicum virgatum (Switchgrass)
Shizachyrium scoparium (Little Bluestem)

As described in UCG Section 5.5.1.E, all public access paths are constructed of pervious surfacing. Any stormwater from public access paths which may not infiltrate through the pervious surfacing has been directed into vegetated areas on either side of the access paths.

- (b) This project site and Urban Coastal Greenway are not listed on the National Register of Historic Places, as determined by the RI Historic Preservation and Heritage Commission (RIHPHC).

- (c) The proposed vegetation within the Urban Coastal Greenway (UCG) shall be properly managed in accordance with the standards contained in Section 5.14 of Urban Coastal Greenways Policy. Refer to Appendix H (UCG Management Plan).

All vegetation proposed to be planted within the UCG consists of non-invasive native or sustainable vegetation consistent with the RI Native Plant Guide (as published by the University of Rhode Island Cooperative Extension) at <https://web.uri.edu/rinativeplants/>; and/or the most current edition of Sustainable Trees and Shrubs, from the University of Rhode Island Cooperative Extension office or the CRMC Rhode Island Coastal Plant Guide at: <http://cels.uri.edu/testsite/coastalPlants/CoastalPlantGuide.htm>. All Coastal Meadow Grass Seeding Mixture is consistent with the RI State Native Mix (as approved by the RIDOT). All of these plant species require low maintenance levels and are anticipated to have a high survival rate. They have also been chosen to provide maximum wildlife habitat and aesthetic value to the UCG.

- (d) The UCG has been designed to contain native plant communities and/or sustainable landscapes using noninvasive native and/or sustainable species of vegetation in order to promote the Council's goal of preserving, protecting, and restoring ecological systems. Refer to Appendix H (UCG Management Plan).
- (e) The waterfront along the Seekonk River contains a high amount of trash and debris. There exists an abandoned barge and deteriorated shoreline protection system comprised of a wooden bulkhead. The barge and abandoned wooden pilings will be removed, as well as any visible trash and debris. The wooden bulkhead will remain largely undisturbed.

With the exception of some larger tree and shrub species along the immediate edge of Omega Pond, there are no substantial trees or vegetation on site. As the area of the UCG will require substantial grading for proper drainage and the entire area is to be revegetated with appropriate coastal plantings, preservation of any existing vegetation in the development area is not a priority. The larger tree and shrub species, where encountered along the shore of Omega Pond, are proposed to be pruned and cleared of invasive vegetative species currently endangering the health of said vegetation. Selective removal of dead and/or fall hazard trees or limbs may be required for public safety during construction procedures. As outlined in sections above, this project proposes the complete revegetation of the UCG with non-invasive native and/or sustainable plantings with the exception of approved public access pathways (as described in UCG Section 5.5.1.E). These plantings will be monitored and allowed to establish naturally in accordance with an approved UCG Management Plan prepared by a RI-licensed landscape architect and in accordance with standards and specifications found in the *Urban Coastal Greenway Design Manual*.

The UCG will be maintained as a fully vegetated coastal zone with the exception of the approved public access pathways. Following construction procedures, all vegetation shall be preserved to the maximum extent practicable. Removal of the proposed plantings will not be allowed without the review and approval of the Rhode Island Coastal Resources Management Council (RICRMC), or its staff.

3.5 SECTION 5.5.1.E: PUBLIC ACCESS STANDARDS FOR ALL URBAN COASTAL GREENWAYS

As preferred by the Council, the development provides a primary (alongshore) public access within the Urban Coastal Greenway. This primary public access pathway is ten (10) feet wide (where the minimum width is five (5) feet) and constructed with a pervious surface. The path is designed to have a relatively flat profile and cross section to prevent stormwater runoff from eroding the path surface or adjacent soils. The Coastal Side UCG includes four (4) access paths, one from the public parking promenade, and three from the coastal roadway loop, and two (2) access routes on the Pond Side. These connect sidewalk traffic with the alongshore UCG path. The access from the coastal public parking promenade to the shoreline has been designed to be compliant with the most recent version of the Americans with Disabilities Act (ADA) Standards for Accessible Design. The public access pathways shall be recorded within the land evidence records and shall run with the land. The limited liability provision stated in RICRMP Section 1.3.6 shall apply to these public access pathways.

In order to facilitate public access to the shoreline, the project includes twenty-five (25) public access spaces on the Coastal Side adjacent to the main public access promenade, and an additional ten (10) public access spaces on the Pond Side. This exceeds the requirement of a minimum of two (2) public parking spaces adjacent to an access point or incorporated within a project, and an additional space per 100 linear feet of shoreline within the parcel.

In order to facilitate public access to the shoreline and promote passive recreational uses of the waterways, and where appropriate based on-site conditions, each project with a UCG must provide a minimum of one public access point that leads directly to the water in the form of a stabilized path or steps, canoe/kayak ramp, overlook, or other access method. To address this requirement, the applicant has proposed to construct a previously permitted dock and canoe launch on the Pond Side of the project (RIDEM File No. 18-0112). This facility will be accessible from the UCG paths and public parking area.

3.6 SECTION 5.5.1.F: STORMWATER STANDARDS FOR ALL URBAN COASTAL GREENWAYS

- (a) The RICRMC encourages the use of low impact development (LID) techniques, as described in the *Urban Coastal Greenway Design Manual* that distribute infiltration methods throughout the development site to the maximum extent practicable. These LID techniques used in the East Point project are:
1. The implementation of vegetated swales, sand filters, and bioretention filters to slow runoff, reduce discharges, and encourage more infiltration and evaporation; and
 2. Planting large trees within the designated UCG and the site in general to promote evapotranspiration, restore urban forests, provide scenic relief, and vegetative screening;
- (b) Stormwater treatment has, where possible, been designed to constitute a landscape amenity in the form of wide vegetated swales within the UCG. The width of these devices and implementation of shallow check dam areas promotes low flow velocities, the deposition of particles, and the infiltration of runoff.

- (c) One proprietary stormwater management device is proposed on the Pond Side of the development where area constraints do not permit a more natural pretreatment device. This device is located outside the UCG, adjacent to the roadway, from which it can easily be maintained. This device shall be maintained in accordance with Section 5.1.5.
- (d) Untreated stormwater runoff will not drain directly into coastal waters. Runoff will be detained and slowly released through the use of best management practices (BMPs). The project meets the requirement of 100% on-site management of stormwater as required by RICRMP Section 1.3.F, and as specified in the most recent edition of the *Rhode Island Stormwater Design and Installation Standards Manual*, to improve water quality, and discharge non-erosively to tidal waters. The applicant has incorporated LID techniques in the form of vegetated swales, sand filters, bioretention filters, and forebays to the maximum extent practicable.
- (e) The stormwater management techniques proposed have an Operations and Maintenance plan submitted as part of the RICRMC application package in accordance with the most recent edition of the *RI Stormwater Design and Installation Standards Manual*. The maintenance provisions are tailored to the specific stormwater management techniques that are proposed for the site, and include maintenance practices and frequency.

3.7 SECTION 5.5.1.G: STRUCTURAL PROTECTION STANDARDS FOR UCG

The existing bulkhead structures will not be disturbed as part of the development. No grading is proposed in the vicinity of these structures which could undermine their integrity.

3.8 SECTION 5.5.1.H: PROHIBITIONS

Upon completion of the project (or phase of the project) and its Urban Coastal Greenway, the following activities and uses shall be prohibited within the UCG:

1. Petrochemical Storage;
2. Storage of other hazardous materials;
3. Parking or automobile storage within the UCG;
4. Application of chemicals (e.g., pesticides, fertilizers, etc.) that have not been approved by the RICRMC;
5. Storage or stockpiling of mulch, compost, or other organic materials;
6. Storage or stockpiling of construction materials;
7. Fueling and servicing of equipment and other motorized vehicles; and
8. Recycling of construction materials.

No structure, building, roof, or skywalk subject to the UCG will be constructed over tidal waters, with the exception of public infrastructure or public access in accordance with the requirements set forth in RICRMP Section 1.1.8.

At no time shall any residential or commercial activity usurp the full use and enjoyment of the UCG. This includes the placement of decks, patios, or restaurant/cafe tables, even on a temporary basis, within the UCG.

3.9 SECTION 5.12: BROWNFIELD REDEVELOPMENT WITHIN THE METRO BAY REGION

Section 5.12.A.3 of the UCG Regulations provides that it is the policy of the CRMC to require the maximum UCG width *practicable* with brownfield sites while allowing for *flexibility* in the implementation of the UCG on these sites. The applicant has complied with this section regard to construction setbacks to the extent possible. See Section 3.1 above.

The project has adhered to the Urban Coastal Greenway standards and policies regarding setbacks, view corridors, and public safety as stated in this document, to the maximum extent practicable

Section 5.12.B(3) further provides that the Executive Director may waive or reduce a particular UCG standard that is *impractical* due to site remediation requirements. Therefore, based on the foregoing, the proposed project as described above is consistent with all applicable goals, policies and regulations of UCG Regulations.

3.10 SECTION 5.13: COMPENSATION OPTIONS FOR UCG REQUIREMENTS

Compensation is required since the applicant proposes a reduction in the Urban Coastal Greenway from the standard UCG width to 50 feet. The applicant has met the general UCG requirements regarding shoreline features, vegetation targets, public access, and minimum width (see Sections above). Similarly, the 15% vegetation requirement and the 100% on-site stormwater management requirements for the development site have been met.

Compensation amounts to be paid to the Urban Coastal Greenways Trust. The RICRMC shall establish these amounts based on the representative waterfront value per acre of the Metro Bay Region municipality as determined by a professional appraisal. This representative waterfront value will be multiplied by 50% to obtain the final dollar amount that shall be levied per square foot of UCG lost.

Compensation for the reduction in UCG may also be offset by the provision of amenities in the public Urban Coastal Greenway. These amenities are provided above any beyond that which is typically required to meet UCG standards. Once the RICRMC has established the compensation value, the total value of the amenities provided within the UCG shall be determined and compared.

3.11 SECTION 5.14: UCG MANAGEMENT AND MAINTENANCE REQUIREMENTS

The Owner of Record of the property will be responsible for maintaining the UCG in accordance with the operative RICRMC Assent, unless the UCG is transferred to another agent (i.e., the municipality, a land



**Northeast Engineers
& Consultants, Inc.**
"A Knowledge Corporation"®



trust, etc.) with that agent's agreement to provide maintenance. The Council shall be the beneficiary of any Urban Coastal Greenway easements, and all easements shall be recorded in the land evidence records of the City of East Providence. See Appendix H for the Urban Coastal Greenway Management Plan.



APPENDIX A PROOF OF OWNERSHIP





City of East Providence Assessment Division

145 TAUNTON AVENUE

EAST PROVIDENCE, RHODE ISLAND 02914-4505

PHONE (401) 435-7574 EMAIL assessor@eastprovidenceri.gov



Roberto L. DaSilva
Mayor

Sarah Frew
Tax Assessor

Proof of Ownership Form

Date: January 4, 2021

TO WHOM IT MAY CONCERN:

According to our records, as of December 31, 2020 the property located at 300 BOURNE AVE
is owned by: CITY OF EAST PROVIDENCE The property is also known as

Map: 203 01 004.00

1

Land: \$ 3,131,800

Building: \$ -

Total: \$ 3,131,800

Legal use questions should be referred to the Building Inspector's Office at 435-7722.

Current, and past, tax bill questions should be referred to the Treasury Division at 435-7544.


Signed: _____

50% preconsumer content  10% postconsumer content

PRINTED ON RECYCLED PAPER

PHONE: (401) 435-7574



City of East Providence Assessment Division

145 TAUNTON AVENUE

EAST PROVIDENCE, RHODE ISLAND 02914-4505

PHONE (401) 435-7574 EMAIL assessor@eastprovidenceri.gov



Roberto V. DaSilva
Mayor

Sarah Frew
Tax Assessor

Proof of Ownership Form

Date: January 4, 2021

TO WHOM IT MAY CONCERN:

According to our records, as of December 31, 2020 the property located at 0 BOURNE AVE
is owned by: CITY OF EAST PROVIDENCE The property is also known as

Map: 303 13 004.00

1

Land: \$ 363,700

Building: \$ -

Total: \$ 363,700

Legal use questions should be referred to the Building Inspector's Office at 435-7722.

Current, and past, tax bill questions should be referred to the Treasury Division at 435-7544.

Signed: _____

50% preconsumer content

10% postconsumer content

PRINTED ON RECYCLED PAPER

PHONE: (401) 435-7574



City of East Providence Assessment Division

145 TAUNTON AVENUE

EAST PROVIDENCE, RHODE ISLAND 02914-4505

PHONE (401) 435-7574 EMAIL assessor@eastprovidenceri.gov



Roberto L. DaSilva
Mayor

Sarah Frew
Tax Assessor

Proof of Ownership Form

Date: January 4, 2021

TO WHOM IT MAY CONCERN:

According to our records, as of December 31, 2020 the property located at 0 BOURNE AVE
is owned by: CITY OF EAST PROVIDENCE The property is also known as

Map: 303 13 005.00

1

Land: \$ 11,300

Building: \$ -

Total: \$ 11,300

Legal use questions should be referred to the Building Inspector's Office at 435-7722.

Current, and past, tax bill questions should be referred to the Treasury Division at 435-7544.


Signed: _____

50% preconsumer content  10% postconsumer content

PRINTED ON RECYCLED PAPER

PHONE: (401) 435-7574



JOSHUA A. BERLINSKY, ESQ.
JBERLINSKY@DARROWEVERETT.COM

PROVIDENCE OFFICE:

One Turks Head Place
Suite 1200
Providence, RI 02903
Tel: (401) 453-1200
Fax: (401) 453-1201

January 11, 2021

Coastal Resources Management Council
Steadman Government Center, Suite 3
4808 Tower Hill Road
Wakefield, RI 02879

Re: Preliminary Determination Request Application for Noble Development, LLC for property located at 300 Bourne Avenue and O Bourne Avenue,, also identified as Parcel 4 on Assessor's Map 203, Block 1 and Parcels 4 and 5 on Assessor's Map 303, Block 14, all located in East Providence, Rhode Island (together the "Property")

Ladies and Gentlemen:

This firm represents the applicable, Noble Development, LLC in connection with its proposed development at the above Property. The purpose of this correspondence is to explain the apparent discrepancy between the owner of the Property as shown on the accompanying correspondence from the East Providence Tax Assessor and the signatory for the Property Owner on the enclosed application.

In 2014, the Honorable Judge Silverstein appointed Attorney Mark Russo as Special Master for the Property for the purpose of "implementing, supervising and bringing to conclusion a Confidential Settlement Agreement" by and between the City of East Providence and Geonova Development Corp. A copy of the 2014 appointment and order is attached hereto. While the City of East Providence maintains ownership of the Property, the Special Master has in effect been placed in charge of the Property's disposition via court order. In August of 2020, the Special Master received the Court's approval to sell the Property to Noble Development, subject to a successful permitting regime.

Thus, while Attorney Russo remains as Special Master and signs all applications and acknowledgements in said capacity, title to the Property remains vested in the City of East Providence. We understand this to be an unusual set of circumstances, and thought a brief explanation might be helpful in this regard.

Thank you for your cooperation in this matter, and we look forward to working with the CRMC on this development.

Please do not hesitate to contact us with any comments or questions.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Josh Berlinsky".

Joshua Berlinsky, Esq.

Enclosure (1)

cc: Noble Development
Northeast Engineers





DGC: 00002308

BK: 3665 PG: 123

COPY

STATE OF RHODE ISLAND
PROVIDENCE, SC.

SUPERIOR COURT

GEONOVA DEVELOPMENT CO., INC. :

VS. :

C.A. NO. PB 09-5341

THE CITY OF EAST PROVIDENCE :

ORDER APPOINTING SPECIAL MASTER

Plaintiff, Geonova Development Co., Inc. ("GeoNova") and Defendant, The City of East Providence ("East Providence") hereby consent to the entry of an Order appointing a Special Master with regard to the former Ocean State Steel Property at East Pointe (the "Subject Property") for the specific purpose of implementing, supervising and bringing to conclusion a Confidential Settlement Agreement entered into by and between Geonova and East Providence.

Upon consideration by the Court and pursuant to the parties' consent, it is hereby

ORDERED, ADJUDGED and DECREED:

1. W. Mark Russo, Esq., of Ferrucci Russo P.C., 55 Pine Street, Providence, Rhode Island shall be and is hereby appointed Special Master (the "Special Master") of the Subject Property for the purpose of implementing, supervising and bringing to conclusion a Confidential Settlement Agreement by and between the parties.

2. The Subject Property is defined in Exhibit A to the East Pointe Property Development and Finance Agreement dated September 26, 2003, and shall include all rights and entitlements relative to the Subject Property, including all permits, approvals, licenses and all such other related entitlements secured pursuant to the development of the Subject Property as outlined in the underlying pleadings (the "Permits and Approvals"). Moreover, all such Permits and Approvals shall be tolled during the term of the Special Mastership.

True Copy Attest
[Signature]
Office of Clerk of Superior Court
Counties of Providence & Bristol
Providence, Rhode Island

Owner: City of East Providence
Property Address: 300 Bourns Avenue, East Providence, RI 02916



BK: 3665 PG: 124

3. The Special Master is authorized to take possession and charge of the Subject Property, including any and all Permits and Approvals, books and/or records relative to the Subject Property and to preserve the same until further order of this Court.

4. The Special Master shall maintain possession of the Confidential Settlement Agreement executed by the parties. The Confidential Settlement Agreement shall remain with the Special Master and remain confidential pending complete performance and the termination of the Special Master's appointment.

5. The said Special Master shall, no later than five (5) days from the date hereof, file a bond in the sum of \$10,000.00 with any surety company authorized to do business in the State of Rhode Island as surety thereon, conditioned that the Special Master will well and truly perform the duties of said office and duly hold, in trust for the benefit of the parties to this action, and others as may be directed by the Court, all monies and property which may come into the Special Master's hands and account for all such monies and property and abide by and perform all things which the Special Master will be directed to do by this Court.

6. The Special Master is granted and shall have all powers and authorities necessary to commence, supervise and bring the terms and conditions of the Confidentiality Settlement Agreement to conclusion, including authority to incur expenses in the Mastership's discretion, as may be desirable or necessary to complete the undertakings set forth herein.

7. That the Special Master shall continue to discharge said Special Master's duties and trusts hereunder until further order of this Court; that the right is reserved to the Special Master and to the parties hereto to apply to this Court for any other or further instructions to said Special Master and that this Court reserves the right, upon such Notice, if any, as it shall deem



BK= 3665 PG= 125

proper, to make such further orders herein as may be proper, and to modify this Order from time to time.

8. Pursuant to this Court's equitable authority, this Court finds that the designation of the afore-described person for appointment as Special Master herein is warranted and required because of the Special Master's specialized expertise and experience in administering non-routine, Special Masterships which involve unusual or complex legal, financial, or business issues.

9. That the commencement, prosecution, or continuance of the prosecution, of any action, suit, arbitration proceeding, hearing, or any foreclosure, reclamation or repossession proceeding, both judicial and non-judicial, or any other proceeding, in law, or in equity or under any statute, or otherwise, against the Subject Property, in any Court, agency, tribunal, or elsewhere, or before any arbitrator, or otherwise by any creditor, stockholder, corporation, partnership or any other person, or the levy of any attachment, execution of other process upon or against the Subject Property, or the taking or attempting to take into possession the Subject Property, or the cancellation at any time during the Special Mastership proceeding herein of any insurance policy, lease or other contract with regard to the Subject Property, by any of such parties as aforesaid, other than the Special Master designated as aforesaid, or the termination of telephone, electric, gas or other utility service to the Subject Property, by any public utility, without prior approval thereof from this Honorable Court, in which connection said Special Master shall be entitled to prior notice and an opportunity to be heard, are hereby restrained and enjoined until further Order of this Court. This paragraph shall not apply to prosecution of this action by the parties to this action. This order is without prejudice to and with reservation of all

RECEIVED
MARCH 1, 2022
COASTAL RESOURCES
MANAGEMENT COUNCIL

BK: 3665 PG: 126

rights of the parties to take discovery, make motions, and to otherwise prosecute the claims and defenses in this action.

10. The Special Master shall give notice of this Order by mailing, on or before September 8th, 2014, a copy of said Order appointing Special Master to each person or entity who has a lien, claim or encumbrance on the Subject Property whose address is known or may become known to the Special Master.

BY ORDER:

ENTER:

[Signature]
Clerk, Superior Court

[Signature]
Judge Michael A. Silverstein
8/19/2014

Submitted by:

Geonova Development Co., Inc.
By its Attorney,
[Signature]
John A. Tarantino (#2586)
Adler Pollock & Sheehan P.C.
One Citizens Plaza, 8th fl.
Providence, RI 02903
Tel.: (401) 274-7200
E-mail: jtarantino@apslaw.com
August
Dated: May 18 2014

The City of East Providence
By its Attorney
[Signature]
Robert C. Corrente (#2632)
Burns & Levinson
One Citizens Plaza, Suite 1100
Providence, RI 02903
Tel.: (401) 831-8330
E-mail: rcorrente@burnslev.com

680868_1.docx

RECORDED
2015 May 05 02:30P
EAST PROVIDENCE, R.I.
KIM A. CAGGI-PALANGIO
CITY CLERK

Owner: City of East Providence
Property Address: 300 Bourne Avenue, East Providence, RI 02916



APPENDIX B LIST OF ABUTTERS





Map	Block	Lot	Unit	Owner	Mailing Address	City	State	Zip
203	1	3		BOURNE HOLDINGS	1080 MAIN ST	PAWTUCKET	RI	02860
303	11	7		HERNANDEZ, JOSE A	137 ROGER WILLIAMS AVE	RUMFORD	RI	02916
303	11	6		LEMOS, HUMBERTO	141-143 ROGER WILLIAMS AVE	RUMFORD	RI	02916
303	1	1		DSD ASSOCIATES	293 BOURNE AVE	RUMFORD	RI	02916
303	11	3	12	CORRIGAN, CATHLEEN D	20 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	18	RICCHI, PAUL G & JOYCE RICCHI LIVING TRUST	32 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	56	BUDZ, NATALIE A & RONALD J	17 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	30	ANTONELLI, JUDITH M	37 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	54	SARAIVA, GREGORY & HARRIS, JENNIFER M	11 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	37	MOSS, JACQUELYN K	23 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	21	PAULHUS, DONALD & CHLOE HOUSLEY	31 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	27	PINEAU, JEDIDIAH D & JENNA C	32 RICHARD CIRCLE	SEEKONK	MA	02771
303	11	3	33	BEVERLY E BAZAR REV TRUST	355 BLACKSTONE BLVD APT 406	PROVIDENCE	RI	02906
303	11	3	38	PINHEIRO, LORI A & OLIVER, STEVEN P & CAROL M	25 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	32	FILIPPO, KIMBERLY	41 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	53	MORRIS, DARLEEN R	9 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	23	LARANGEIRA, MANUEL S & JOANN M	27 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	25	DOMENICO, LAURA B & JOSEPH K	22 LINDA ST	LINCOLN	RI	02865-2216
303	11	3	13	LORD, KATHLEEN L	PO BOX 3524	WESTPORT	MA	02790
303	11	3	1	PITI, VIRGINIA	P O BOX 14023	E PROVIDENCE	RI	02914-0023
303	11	3	17	AYLIFFE-JESSUP, CORIAN S & GAIL	30 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	24	MOSELEY, ROBERT F & MARY JANE	25 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	36	KOHLER, RICHARD R & MARY D	27 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	11	TRASK, ANTHONY B & ANN D	18 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	55	MARTIN, MICHAEL J & SONNENTAG, JUNE H	15 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	15	HOLLAND, EUGENE F & RUTH E	33 DROWNE PK	RUMFORD	RI	02916
303	11	3	7	MARQUES, ORIANA S	6 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	34	DANHO, DENISE C	31 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	26	KEITH, CHRISTOPHER E & CARHART, JEANNE M	23 MORRA WAY	RUMFORD	RI	02916
303	11	3	14	ACKAWAY, JOSEPH & BARBARA	24 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	20	HOLEWA, BARBARA D	36 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	4	RAFFAELE M & KRISTINA C MARZIALE LIV TR	50 BERRY LN	BRISTOL	RI	02809
303	11	3	9	WHITEHEAD, RICHARD A	2 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	31	RI PROPERTY WIRE LLC	129 WARREN AVE	PAWTUCKET	RI	02806
303	11	3	6	TEKNOR APEX COMPANY	PO BOX 2290	PAWTUCKET	RI	02861

Abutter's List
 East Providence
 Map 203 Block 1 Lot 4
 Map 303 Block 13 Lots 4 5

303	11	3	58	GENDREAU, ANDREW P & LORI	21 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	5	SOUTO, MATTHEW A & PASCOA, NICOLE	14 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	10	SATTERLEE, SARAH A	4 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	2	POINT, RAYMOND J JR	162 BOURNE AVE	RUMFORD	RI	02916
303	11	3	16	REV LIV TR AGR OF DENISE A FRAGEORGIA	W/LIF FRAGEORGIA, DENISE A	RUMFORD	RI	02916
303	11	3	28	KANE, MARTHA K	17 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	35	BARRY, PATRICIA A	29 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	3	CABRAL, ALAN R & GONZALEZ, TONI MARIE	10 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	8	PECK, LINDA	8 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	22	COSTA, ALLEGRA	29 RIVERWOODS CT	RUMFORD	RI	02916
303	11	3	57	COUTU, COURTNEY L	19 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	29	CAPINERI, MICHAELS	35 WOOD HOLLOW LN	RUMFORD	RI	02916
303	11	3	19	LAI, YI-WEN	34 RIVERWOODS CT	RUMFORD	RI	02916
303	11	4		ROGER WILLIAMS AVENUE ASSOCIATES LLC	155 ROGER WILLIAMS AVE	RUMFORD	RI	02916
203	1	5		STATE OF RHODE ISLAND DEPT OF TRANSPORTATION	TWO CAPITAL HILL	PROVIDENCE	RI	02903
303	12	13		BOURNE HOLDINGS LLC	1080 MAIN ST	PAWTUCKET	RI	02860
303	11	5		SUAREZ, JOHNNY & ALVAREZ, JACQUELINE	147 ROGER WILLIAMS AVE	RUMFORD	RI	02916
303	13	1		GUSTAFSON, DAVID H	15 OMEGA WAY	RUMFORD	RI	02916
303	13	3		GRACE CHAPEL ASSEMBLY OF GOD	130 ROGER WILLIAMS AVE	RUMFORD	RI	02916
303	1	3		SAO REALTY COMPANY	PO BOX 14529	EAST PROVIDENCE	RI	02914
303	1	2		SAO REALTY COMPANY	PO BOX 14529	EAST PROVIDENCE	RI	02914
303	1	19		STATE OF RHODE ISLAND DEPT OF TRANSPORTATION	TWO CAPITAL HILL	PROVIDENCE	RI	02903





APPENDIX C CRMC PRELIMINARY DETERMINATION



**RHODE ISLAND COASTAL RESOURCES MANAGEMENT COUNCIL
REPORT OF FINDINGS -- PRELIMINARY DETERMINATION**



STATEMENT OF LIMITATIONS

The contents of this staff determination report shall be valid only for the period on and preceding the date of this report. This report is neither an approval nor denial of the subject proposal. It is an evaluation of CRMC regulations in effect as of **February 24, 2021** as they pertain to the below stated proposal, including preliminary staff recommendations.

Modifications to the below stated proposal may, upon the discretion of the CRMC, render this determination null and void.

APPLICANT INFORMATION

NAME: W. Mark Russo (Special Master) Noble Development, LLC **CRMC FILE NO.** 2021-01-027

LOCATION: Roger Williams & Borne Avenue(s)

CITY/TOWN: East Providence

PLAT(S): Map 303 Block 13

LOT(S): 4 & 5

CONTACT PERSON(S) & ADDRESS:

- W. Mark Russo, Esq., Special Master, 55 Pine Street, 4th Floor, Providence, RI 02903
- Noble Development, LLC, 10 Green Street, Providence, RI 02903
- Geralyn Small, PE, Northeast Engineers and Consultants, Inc., 6 Valley Rd., Middletown, RI 02842

PRELIMINARY REVIEW INFORMATION

PROPOSAL: Construct a multi-family development to consist of 385 residential units to include single family homes, duplex homes, multi-unit homes and townhouses, apartment structures and garages. The project includes new roadways and parking areas with stormwater treatment areas for impervious surfaces. City water and sewer service will be provided. A public greenway with public parking is proposed in accordance with CRMC's Metro Bay Special Area Management Plan.

PLAN(S) REVIEWED: "Map 203 Block 1, Lot 4, Roger Williams Avenue, East Providence, Rhode Island – Site Plan", in two sheets, site plan (coastal side) and site upland (upland side), by Northeast Engineers and Consultants, Inc., dated 11Jan21.

INVESTIGATOR

DATE

TIME

David Reis

Office Review Only

MEASUREMENTS & OBSERVATIONS: CRMC Staff is familiar with the site through prior development proposal assessments and other permitting actions including site remediation. No site inspection was conducted for purposes of this review.

PREVIOUS CRMC ACTIONS FOR SITE: Amongst other CRMC actions which can be reviewed through CRMC's Database, a prior development was approved for this site which was never constructed. See CRMC File No. 2007-02-058.



SUMMARY OF FINDINGS

CRMC JURISDICTION: **(YES)** **TYPE WATER:** Type 4, Multi-Purpose Waters, Seekonk River and Type 6, Industrial Waterfronts and Commercial Navigation Channels, Seekonk River Federal Navigation channel.

For the purpose of this review the coastal feature(s) shall be the manmade shoreline (fill slope) and coastal wetland and the inland edge of coastal(s) feature shall be the top of the manmade fill slope.

Applicability of CRMP and SAM Plans (as amended):

CRMP (Red Book/650-RICR-20-00-01) Sections: The Buffer and Setback sections are not applicable if the project review is conducted under the Metro Bay SAMP. However, companion sections of the Red Book may be relevant to the project review. An example is policies for the water types adjacent to the site and standards for earthwork (filling removing and grading).

FW Wetlands: The Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (650-RICR-20-00-2) will be applicable to Omega Pond and bordering wetlands.

SAM PLAN: Based on the submitted plans, the project review will be conducted primarily under the Metro Bay Special Area Management Plan (MB SAMP/650-RICR-20-00-5).

BUFFER (ref. Section 1.1.11 CRMP): Absent review under the Metro Bay SAMP, the applicable buffer zone would be 150 feet.

SETBACK (ref. Section 1.1.9 CRMP): Absent review under the Metro Bay SAMP, the applicable setback would be 175 feet.

STAFF CONCERNS/COMMENTS/INFORMATION REQUIREMENTS:

General: The submitted plans indicate the applicant has chosen to proceed under the Metro Bay Special Area Management Plan (MB SAMP) as opposed the “standard” buffer zone and setback provisions contained in the ‘Redbook’. In addition, where the RI Department of Environmental Management (RI DEM) defers freshwater wetlands jurisdiction to CRMC for the area bordering Omega Pond; the CRMC will allow greenway practices to occur within the “area of land within fifty feet” (perimeter wetland). However, native vegetation should be retained and restored within this area with habitat quality being a key consideration in the greenway development plans for the Omega Pond shoreline.

The following sections of the MB SAMP apply to the project proposed:

- 1. MB SAMP applicability:** It is important that the MB SAMP be reviewed in its entirety. Although certain key policies and regulatory standards are highlighted in this Preliminary Determination, this report does not provide an all-inclusive evaluation of the project against the entirety of the SAMP. The applicant is advised to address any and all applicable MB SAMP requirements.



NAME: W. Mark Russo (Special Master) Noble Development, LLC

CRMC FILE NUMBER: 2021-01-027

Page 3 of 5

2. **Coastal Feature and Wetland Edge Verification:** The coastal feature and wetland edges of regulated resources have not been verified as part of this Preliminary Determination review. However, based on CRMC Staff knowledge of the area and review against the plans contained in CRMC File No. 2007-02-058, the coastal feature delineation appears to be sufficiently accurate for review and project permitting. It should be considered that the inland edge of the coastal feature on the “coastal” (Seekonk River) side is considered to be the top of the manmade fill slope. This manmade slope is not considered to be a coastal bluff or bank. In some areas, the lower portion and bottom of the fill slope is inhabited by coastal wetland plant communities and is considered “coastal wetland”. The freshwater wetland edge on Omega Pond requires future verification. The wetland edge in the vicinity of flag A13 appears to be of concern,
3. **MB SAMP §5.9 - Development Zone:** The project is located within an area designated a “Development Zone” by the MB SAMP and thereby subject to MB SAMP §5.9. The project plans indicate the applicant has chosen to adhere to “Option 3” which provides for a 50’ wide compact greenway. The applicant is advised that the standard greenway width is 100’ but Option 3 allows for a compact 50’ (reduced width) greenway with compensation as described by MB SAMP §5.3. Based on a review of the current project plans, the 50’ compact greenway requirement is met but few compensation measures are noted.

Regarding compensation, the Urban Coastal Greenway Trust has not been authorized by the RI General Assembly and on that basis, on-site compensation measures and amenities should be considered. A review of the project plans indicates the southwest point (coastal side, sheet 1 of 1) where the water quality device is proposed may be included in an enlarged greenway as compensation and greenway averaging if the treatment device is designed as a vegetated (appropriately landscaped) treatment practice and co-designed for aesthetic and recreational enjoyment. Perimeter amenities may include a gazebo (shelter), benches, informational kiosks, trash receptacles, etc. Additional “public seating areas” (with appropriate details) as shown in the southeast corner of the site may be added throughout the greenway.

Similarly, the entire area south of the main access roadway on the upland side (sheet 2 of 2) may be designated as a public greenway bordering Omega Pond and the water quality treatment device should also be designed as a vegetated treatment practice co-designed for aesthetic and recreational enjoyment. A “small” public fishing pier at Omega Pond may provide an appropriate greenway compensation method provided site conditions are determined to be conducive to pier construction. Appropriate site conditions include sufficient water depth and sediment characteristics necessary to support fixed pier pilings. Any fixed pier provided should be ADA compliant and have appropriate railings consistent with State building code requirements.

4. **MB SAMP §5.5.1(A)- Standards Applicable to the Entire Development:** The following standards must be met:
 - o **Minimum 15% Vegetation requirement:** The project plans must demonstrate that at least 15% of the surface area of the entire development parcel is appropriately vegetated with native or sustainable plants. Qualifying areas must provide an appropriate mix of trees, shrubs and ground cover with minimum use of lawn sod or grasses.



NAME: W. Mark Russo (Special Master) Noble Development, LLC

CRMC FILE NUMBER: 2021-01-027

Page 4 of 5

- **Stormwater Management:** The project should provide 100% on-site management of stormwater consistent with the MB SAMP requirements. The project plans currently provide few treatment practice details and, on that basis, the CRMC has limited comments at this time. However, treatment practices involving vegetated surface treatment which provides recreational and aesthetic values may be contained within an expanded greenway area as herein discussed. It further appears the treatment areas should be further disconnected, and areas shown as “parking islands and medians” in the parking lots should be used vegetated stormwater treatment.
 - **Public Access:** As required, public access pathways are shown along the Seekonk River and Omega Pond shorelines. Public pathways must be a minimum of 8 feet wide and compliant with the American and Disabilities Act (ADA) requirements. The pathway should be pervious unless stormwater management is provided for the path.
 - **Construction Setback:** The project appears to meet the required 25’ setback from the Urban Coastal Greenway. It is recommended that continued adherence to the setback be provided as the project plans advance.
5. **Urban Coastal Greenway (UCG) Easement:** Consistent with MB SAMP procedures, a UCG Easement must be submitted to the CRMC for review and approval. Once approved by the CRMC, the Easement shall be recorded in the Land Evidence Records in the City of East Providence. All rules for public use of the greenway and a greenway management plan must be included as attachments (exhibits) to the easement. Public parking for the UCG must also be addressed through a permanent easement.
 6. **Greenway Parking:** The greenway parking locations shown on the development plans should include appropriate signage to delineate these spaces as public parking. All signs and greenway rules and access provisions shall be subject to CRMC approval.
 7. **Vegetative Cover:** All site plantings, greenway plantings and plantings utilized for vegetated water quality treatment must be restricted to species included on the most recent list of native, sustainable and coastal plants posted on CRMC’s Web site.
 8. **Abandoned Barge:** The barge located along the western shoreline segment shall be removed for disposal at an appropriate upland location.
 9. **Future Marina Consideration:** Please be advised that future marina development has been considered for other projects evaluated at this location. During these discussions, the applicants were advised that there are significant concerns for the construction of a marina due to the following: On the south side of the site, concerns include proximity to the anadromous fish restoration project at the Omega Pond Dam which provides the only link to the Ten Mile River/Turner Reservoir System. The Omega Pond Dam fishway further provides an enhanced sport fishery in the vicinity of the Dam due to predatory sportfish (bluefish and striped bass) being attracted to the herring run. And, on the west side of the project, the federal navigation channel for the Seekonk River runs immediately along the western shoreline of the project thereby preventing marina development along this shoreline.



NAME: W. Mark Russo (Special Master) Noble Development, LLC

CRMC FILE NUMBER: 2021-01-027

Page 5 of 5

10. Due to known environmental contamination and former industrial uses, all project development must be coordinated with the RI Department of Environmental Management, Office of Land Revitalization and Sustainable Materials Management. The required reviews and authorizations from RIDEM are considered prerequisite approvals to CRMC approval. However, it is recommended that application materials be forwarded to the CRMC and RIDEM concurrently to allow a coordinated review of the project.

SIGNATURE: David S. Reis **STAFF ENVIRONMENTAL SCIENTIST**



APPENDIX D CITY OF EAST PROVIDENCE BUILDING OFFICIAL LETTER



TO: Coastal Resources Management Council
4808 Tower Hill Road Suite 3
Wakefield, RI 02879
Phone: (401) 783-3370 / Fax: (401) 783-2069



FROM: Building Official

DATE: June 3, 2021

SUBJ: Application of: Noble Development, LLC (City of E. Providence / W. Mark Russo Esq. Special Master)

Location: Seekonk River / Omega Pond

Address: Roger Williams Avenue / Bourne Avenue Map 203 Map 303

Plat(s): Block 1 Block 13 Lot(s):
Lot 4 Lots 4 & 5

To Construct: Multifamily Development with public roadways, urban coastal greenways, canoe launch, and associated utilities and stormwater controls

I hereby certify that I have reviewed _____ foundation plan(s).

_____ plan(s) for entire structure

site plans

Titled: East Point Multifamily Development, former Ocean State Steel Site, Map 203 Block 2 Lot 4 and Map 303 Block 13 Lots 4 & 5, Roger Williams Avenue and Bourne Avenue, East Providence, RI

Date of Plan (last revision): June 3, 2021

_____ and find that the issuance of a local building permit is not required as in accordance with Section _____ of the Rhode Island State Building Code.

_____ and find that the issuance of a local building permit is required. I hereby certify that this permit shall be issued once the applicant demonstrates that the proposed construction/activity fully conforms to the applicable requirements of the RISBC, and all other local, state and federal regulations are met.

_____ and find that a Septic System Suitability Determination (SSD) must be obtained from the RI Dept. of Environmental Management.

_____ and find that a Septic System Suitability Determination (SSD) need not be obtained from the RI Dept. of Environmental Management.

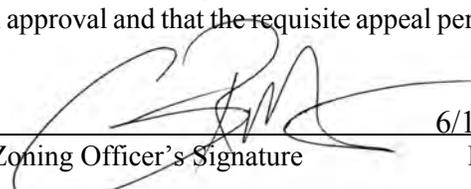
_____ and find NO structural or non-structural fill is proposed in a FEMA-designated V-Zone or Coastal A-zone.

_____ and find that the proposed fill is considered non-structural fill and meets FEMA NFIP guidelines.

_____ and find that said plans conform with all elements of the zoning ordinance, and that if said plans require zoning board approval, that the applicant has secured such approval and that the requisite appeal period has passed with no appeal filed or appeal is final. The Zoning Board approval shall expire on: _____.

Building Official's Signature Date

and find that said plans conform with all elements of the zoning ordinance, and that if said plans require zoning board approval, that the applicant has secured such approval and that the requisite appeal period has passed with no appeal filed or appeal is final.



Zoning Officer's Signature Date

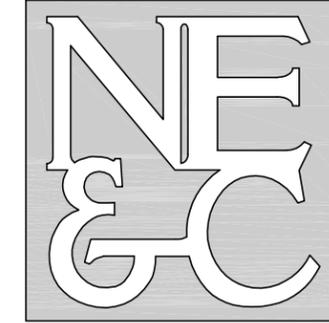


APPENDIX E PUBLIC ACCESS PLAN





NORTHEAST ENGINEERS
& CONSULTANTS, INC.



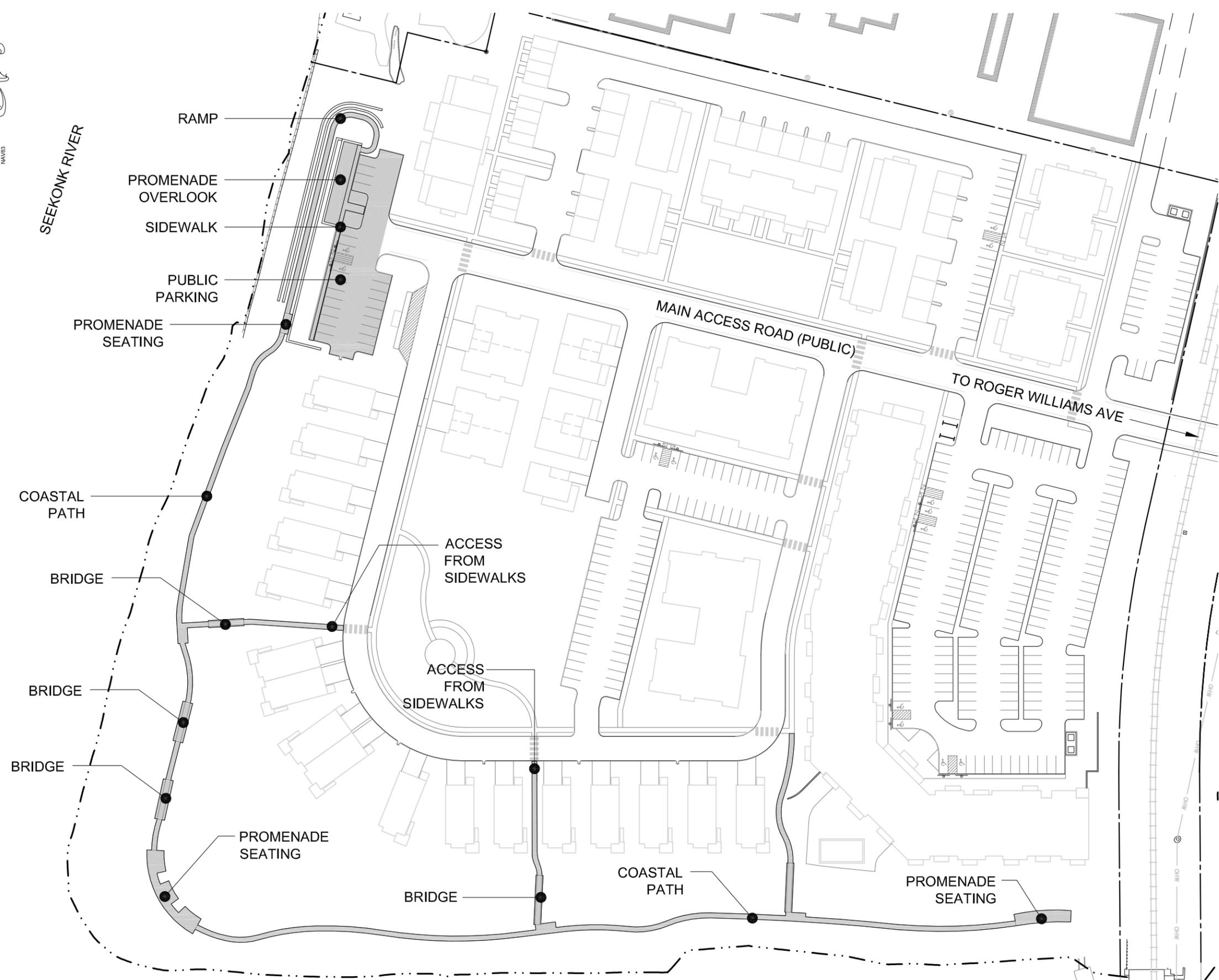
A KNOWLEDGE CORPORATION®

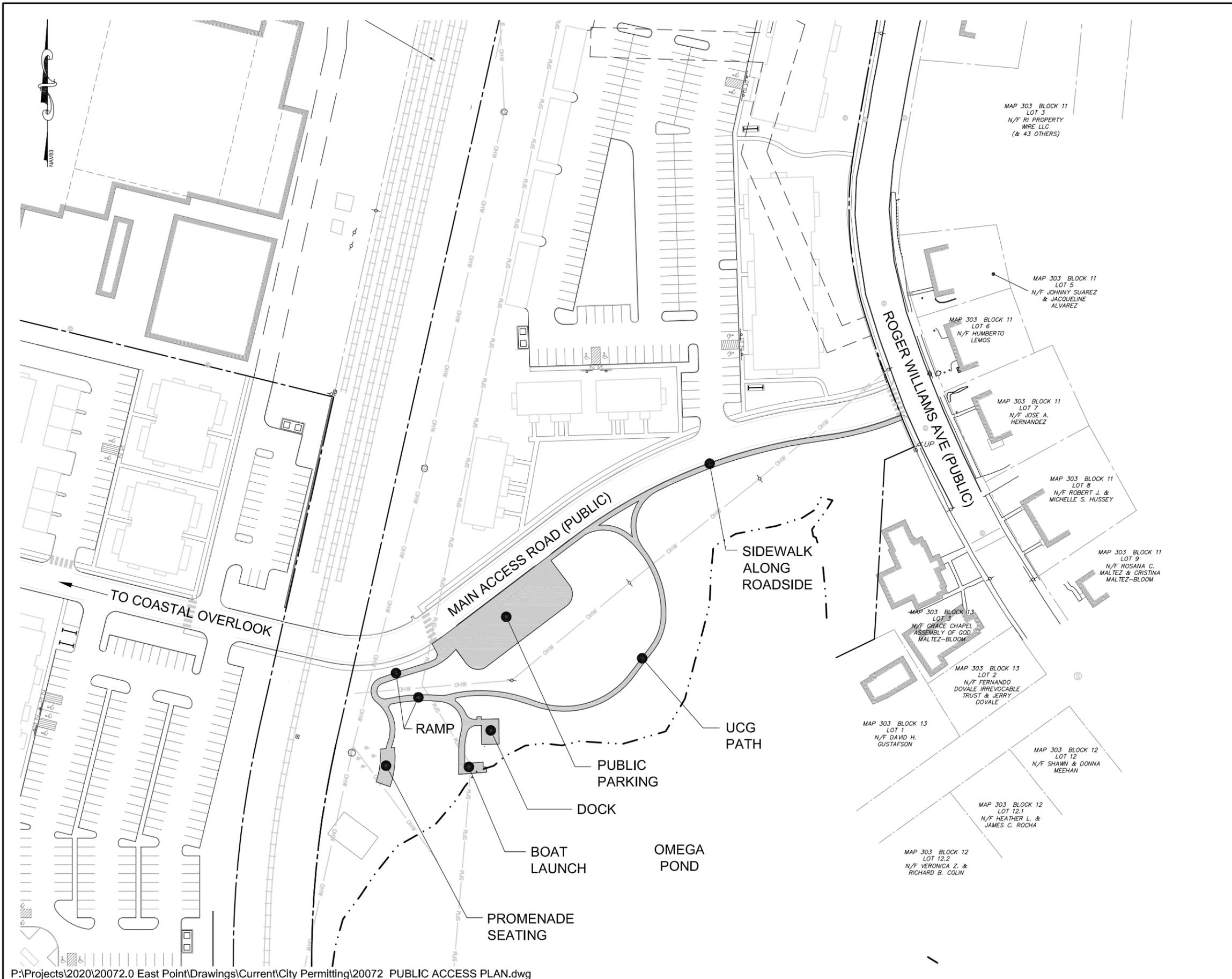
6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842
PHONE (401) 849-0810 FAX (401) 846-4169
WWW.NORTHEASTENGINEERS.COM

- SITE/CIVIL
- LAND PLANNING
- WATERFRONT
- SURVEYING
- GEOTECHNICAL
- ENVIRONMENTAL
- TRANSPORTATION
- STRUCTURAL

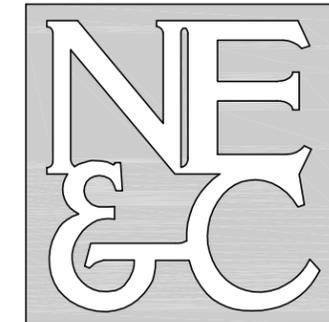


Drawn by:	JJR	Checked by:	GES
Scale:	1"=100'	Date:	22FEB22
"EAST POINT" ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND			
Issued for:			
PERMITTING			
Drawing Title:			
PUBLIC ACCESS PLAN (COASTAL SIDE)			
Drawing Number:			
PA-1			
Project Number:			
20072.0			





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- WATERFRONT
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- GEOTECHNICAL
- ENVIRONMENTAL
- TRANSPORTATION
- STRUCTURAL



Drawn by:	JJR	Checked by:	GES
Scale:	1"=100'	Date:	03JUN21
"EAST POINT" ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND			
Issued for:			
PERMITTING			
Drawing Title:			
PUBLIC ACCESS PLAN (POND SIDE)			
Drawing Number:			
PA-2			
Project Number:			
20072.0			



APPENDIX F PHOTOS





Photo 1: View from southeast end of Coastal Side looking west



Photo 2: View east along Pond Side access

RECEIVED
MARCH 1, 2022
COASTAL RESOURCES
MANAGEMENT COUNCIL



Photo 3: Facing west from coastal side



Photo 4: View west of barge to be removed

RECEIVED

MARCH 1, 2022

**COASTAL RESOURCES
MANAGEMENT COUNCIL**



Photo 5: View east along Coastal Side timber bulkhead



Photo 6: View east along Coastal Side top of slope



Photo 7: ???



Photo 8: View north from RR track crossing



Photo 9: Omega Pond Dam



Photo 10: Omega Pond dam



Photo 11: Vegetation adjacent Omega Pond



Photo 12: Vegetation adjacent Omega Pond



Photo 13: Vegetation adjacent Omega Pond



Photo 14: Deteriorating coastal decking

RECEIVED
MARCH 1, 2022
COASTAL RESOURCES
MANAGEMENT COUNCIL



Photo 15: West side shoreline looking south



Photo 16: Coastal vegetation

RECEIVED
MARCH 1, 2022
COASTAL RESOURCES
MANAGEMENT COUNCIL



Photo 17: Deteriorating barge to be removed



Photo 18: Southwest tip of coastal side





APPENDIX G ELUR DECLARATIONS





ENVIRONMENTAL LAND USAGE RESTRICTION

This Declaration of Environmental Land Usage Restriction ("Restriction") is made on this 11th day of MAY, 2006 by The City of East Providence, State of Rhode Island, and its successors and/or assigns (hereinafter, the "Grantor").

WITNESSETH:

WHEREAS, the Grantor is the owner in fee simple of certain real property identified as Map 203, Block 1, Parcel 4 and Map 303, Block 13, Lots 4 and 5 located in the City of East Providence, Rhode Island (the "Property"), more particularly described in Exhibit A (Legal Description) that is attached hereto and made a part hereof;

WHEREAS, the portions of the Property identified in the Class I surveys which are attached hereto as Exhibit 2A and are made a part hereof (the "Restricted Portions of the Property") have been determined to contain soil which is contaminated with certain hazardous materials and/or petroleum in excess of applicable Method 1 residential direct exposure criteria pursuant to the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases ("Remediation Regulations");

WHEREAS, the Grantor has determined that the environmental land use restrictions set forth below are consistent with the regulations adopted by the Rhode Island Department of Environmental Management ("Department") pursuant to R.I.G.L. § 23-19.14-1;

WHEREAS, the Department's written approval of this Restriction is contained in the document entitled Settlement Agreement and Covenant Not to Sue by and among the Department, the Grantor and GeoNova Development Company, LLC dated June 27, 2003, (the "Settlement Agreement") and issued pursuant to the Remediation Regulations;

WHEREAS, to prevent exposure to or migration of hazardous substances and to abate hazards to human health and/or the environment, and in accordance with the Settlement Agreement, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the Restricted Portions of the Property;

WHEREAS, the Grantor believes that this Restriction will effectively protect public health and the environment from such contamination; and

WHEREAS, the Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against the Grantor and the Grantor's successors and assigns.



NOW, THEREFORE, Grantor agrees as follows:

A. Restrictions Applicable to the Property: In accordance with the Settlement Agreement, the use, occupancy and activity of and at the Restricted Portions of the Property is restricted as follows:

- i. No residential use of the Restricted Portions of the Property shall be permitted that is contrary to Department approvals and restrictions contained herein;
- ii. No groundwater at the Restricted Portions of the Property shall be used as potable water;
- iii. No soil at the Restricted Portions of the Property shall be disturbed in any manner without written permission of the Department's Office of Waste Management, except as permitted in the Remedial Action Work Plan (RAWP) and Soil Management Plan (SMP) approved by the Department in written approval letters dated April 12 and 13, 2004, which is Exhibit B and attached hereto;
- iv. Humans engaged in activities at the Restricted Portions of the Property shall not be exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department-approved residential direct exposure criteria set forth in the Remediation Regulations; and
- v. The engineered controls at the Restricted Portions of the Property described in the RAWP or SMP contained in Exhibit B attached hereto shall not be disturbed and shall be properly maintained to prevent humans engaged in activity at the Restricted Portion of the Property from being exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department-approved residential direct exposure criteria in accordance with the Remediation Regulations; and

B. No action shall be taken, allowed, suffered, or omitted at the Restricted Portions of the Property/ Contaminated Site if such action or omission is reasonably likely to:

- i. Create a risk of migration of hazardous materials and/or petroleum;
- ii. Create a potential hazard to human health or the environment; or
- iii. Result in the disturbance of any engineered controls utilized at the Restricted Portions of the Property, except as permitted in the Department-approved RAWP or SMP contained in Exhibit B.

C. Emergencies: In the event of any emergency which presents a significant risk to human health or to the environment, including but not limited to, maintenance and repair of utility lines or a response to emergencies such as fire or flood, the application of Paragraphs A (iii.-v.) and B above may be suspended, provided such risk cannot be abated without suspending such Paragraphs and the Grantor complies with the following:



- i Grantor shall notify the Department's Office of Waste Management in writing of the emergency as soon as possible but no more than three (3) business days after Grantor's having learned of the emergency. (This does not remove Grantor's obligation to notify any other necessary state, local or federal agencies.);
- ii Grantor shall limit both the extent and duration of the suspension to the minimum period reasonable and necessary to adequately respond to the emergency;
- iii Grantor shall implement reasonable measures necessary to prevent actual, potential, present and future risk to human health and the environment resulting from such suspension;
- iv Grantor shall communicate at the time of written notification to the Department its intention to conduct the emergency response actions and provide a schedule to complete the emergency response actions;
- v Grantor shall continue to implement the emergency response actions, on the schedule submitted to the Department, to ensure that the Restricted Portions of the Property is remediated in accordance with the Remediation Regulations (or applicable variance) or restored to its condition prior to such emergency. Based upon information submitted to the Department at the time the ELUR was recorded pertaining to known environmental conditions at the Restricted Portions of the Property, emergency maintenance and repair of utility lines shall only require restoration of the Restricted Portions of the Property to its condition prior to the maintenance and repair of the utility lines; and
- vi Grantor shall submit to the Department, within ten (10) days after the completion of the emergency response action, a status report describing the emergency activities that have been completed.

D. Release of Restriction; Alterations of Subject Area: The Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of the Restricted Portions of the Property inconsistent with this Restriction unless the Grantor has received the Department's prior written approval for such alteration. If the Department determines that the proposed alteration is significant, the Department may require the amendment of this Restriction. Alterations deemed insignificant by the Department will be approved via a letter from the Department. The Department shall not approve any such alteration and shall not release the Restricted Portions of the Property from the provisions of this Restriction unless the Grantor demonstrates to the Department's satisfaction that Grantor has managed the Restricted Portions of the Property in accordance with applicable regulations.

E. Notice of Lessees and Other Holders of Interests in the Property: The Grantor, or any future holder of any interest in the Property, shall cause any lease, grant, or other transfer of any interest in the Property to include a provision expressly requiring the lessee, grantee, or

transferee to comply with this Restriction. The failure to include such provision shall not affect the validity or applicability of this Restriction to the Property.

- F. Enforceability:** If any court of competent jurisdiction determines that any provision of this Restriction is invalid or unenforceable, the Grantor shall notify the Department in writing within fourteen (14) days of such determination.
- G. Binding Effect:** All of the terms, covenants, and conditions of this Restriction shall run with the land and shall be binding on the Grantor, its successors and assigns, and each owner and any other party entitled to control, possession or use of the Property during such period of ownership or possession.
- H. Inspection & Non-Compliance:** It shall be the obligation of the Grantor, or any future holder of any interest in the Property, to provide for annual inspections of the Property for compliance with the ELUR in accordance with Department requirements.

An officer or director of the company with direct knowledge of past and present conditions of the Property (the "Company Representative"), or a qualified environmental professional will, on behalf of the Grantor or future holder of any interest in the Property, evaluate the compliance status of the Property on an annual basis. Upon completion of the evaluation, the Company Representative or environmental professional will prepare and simultaneously submit to the Department and to the Grantor or future holder of any interest in the Property an evaluation report detailing the findings of the inspection, and noting any compliance violations at the Property. If the Property is determined to be out of compliance with the terms of the ELUR, the Grantor or future holder of any interest in the Property shall submit a corrective action plan in writing to the Department within ten (10) days of receipt of the evaluation report, indicating the plans to bring the Property into compliance with the ELUR, including, at a minimum, a schedule for implementation of the plan.

In the event of any violation of the terms of this Restriction, which remains uncured more than ninety (90) days after written notice of violation, all Department approvals and agreements relating to the Restricted Portion of the Property may be voided at the sole discretion of the Department.

- I. Terms Used Herein:** The definitions of terms used herein shall be the same as the definitions contained in Section 3 (DEFINITIONS) of the Remediation Regulations.

IN WITNESS WHEREOF, the Grantor has hereunto set its hand and seal on the day and year set forth above.

The City of East Providence, State of Rhode Island
Grantor

By:

Jeanne M. Boyle

Authorized Official (signature)

Jeanne M. Boyle

Authorized Official (typed name)
Acting City Manager



STATE OF RHODE ISLAND

COUNTY OF PROVIDENCE

In East Providence in said County and State, on the 11th day of May, 2006, before me personally appeared Jeanne Boyle, to me known and known by me to be the party executing the foregoing instrument and he/she acknowledged said instrument by him/her executed to be his/her free act and deed and the free act and deed of the City of East Providence.

Notary Public: Stephanie A. Camille

My Comm. Expires: 4/19/08

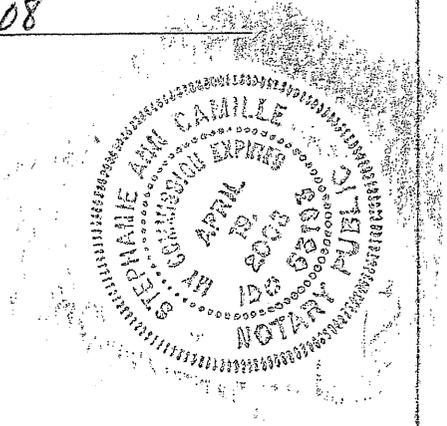


EXHIBIT A
LEGAL DESCRIPTION





Map 203 Block 1 Lot 4
 Roger Williams Ave. & Bourne Ave.
 East Providence, Rhode Island

That certain tract or parcel of land situated of westerly of Roger Williams Avenue, southerly of Bourne Avenue and northerly of Omega Pond in the City of East Providence, Providence County and State of Rhode Island and Providence Plantations designated as Map 203 Block 1 Lots 4 on a plan entitled "Boundary Survey Plan Map 203 Block 1 Lot 4 Map 303 Block 13 Lot 4 & 5 Roger Williams Ave. & Bourne Ave. East Providence, RI P02.104 Scale: 1"=80' Date: Sept. 23, 2002 Revised: 3/6/03 Prepared For: GeoNova Development Company 1114 Avenue of the Americas New York, New York 10036." Said parcel is more particularly bounded and described as follows;

Beginning at a point in the westerly line of land now or formerly of the State of Rhode Island (the East Bay Railroad line) at the southeasterly corner of land now or formerly of Phillipsdale Landing Partners, L.P. and the northeasterly corner of the parcel herein-described;

thence proceeding S 12°43'39" W, a distance of three hundred forty five and 05/100 (345.05') feet to a point of curvature;

thence proceeding southerly, along an arc of a curve, tangent to the previous course, deflecting to the left having a central angle of 13°08'55" and a radius of 1081.23', an arc distance of two hundred forty eight and 13/100 (248.13') feet to a point of tangency;

thence proceeding S 00°25'16" E, tangent to the previous course, a distance of two hundred (200'±) feet, more or less to the mean high water line of the Seekonk River. The last three herein-described courses are bounded easterly by the said State of Rhode Island land;

thence proceeding westerly, northwesterly and northerly along the said mean high water line of the Seekonk River, a distance of one thousand nine hundred fifty six (1,956'±) feet, more or less to the said Phillipsdale Landing Partners, L.P. land and the northwesterly corner of the parcel herein-described;

thence proceeding S 76°16'55" E, a distance of eighty six (86'±) feet, more or less to a corner;

thence proceeding N 12°41'45" E, a distance of fifty one and 00/100 (51.00') feet to a corner;

thence proceeding S 76°15'55" E, a distance of eighty and 00/100 (80.00') feet to a corner;

thence proceeding N 12°41'45" E, a distance of forty seven and 02/100 (47.02') feet to a corner;

thence proceeding S 76°16'35" E, a distance of seven hundred forty and 00/100 (740.00') feet to the said State of Rhode Island land and the point and place of beginning. The last five herein-described courses are bounded by the said Phillipsdale Landing Partners, L.P. land.



Map 203 Block 1 Lot 4
Roger Williams Ave. & Bourne Ave.
East Providence, Rhode Island

The above-described parcel contains 854,981 square feet (19.628 Acres±) more or less of land, and may be subject to and benefited by easements and rights of way of record.



Map 303 Block 13 Lots 4 & 5
 Roger Williams Ave. & Bourne Ave.
 East Providence, Rhode Island

That certain tract or parcel of land situated westerly of Roger Williams Avenue, southerly of Bourne Avenue and northerly of Omega Pond in the City of East Providence, Providence County and State of Rhode Island and Providence Plantations designated as Map 303 Block 13 Lots 4 & 5 on a plan entitled "Boundary Survey Plan Map 203 Block 1 Lot 4 Map 303 Block 13 Lot 4 & 5 Roger Williams Ave. & Bourne Ave. East Providence, RI P02.104 Scale: 1"=80' Date: Sept. 23, 2002 Revised: 3/6/03 Prepared For: GeoNova Development Company 1114 Avenue of the Americas New York, New York 10036." Said parcel is more particularly bounded and described as follows;

Beginning at the intersection of the westerly street line of Roger Williams Avenue with the southerly street line of Bourne Avenue, said point being the northeasterly corner of the parcel herein-described;

thence proceeding S 10°08'47" W, by and with the said westerly street line of Roger Williams Avenue, a distance of two hundred thirty four and 95/100 (234.95') feet to a point of curvature;

thence proceeding southerly and southeasterly by and with the said westerly street line of Roger Williams Avenue, along an arc of a curve, tangent to the previous course, deflecting to the left having a central angle of 27°24'30" and a radius of 360.12', an arc distance of one hundred seventy two and 27/100 (172.27') feet to a point of compound curvature;

thence continuing southeasterly by and with the said westerly street line of Roger Williams Avenue, along an arc of a curve, tangent to the previous course, deflecting to the left having a central angle of 6°41'27" and a radius of 1228.11', an arc distance of one hundred forty three and 41/100 (143.41') feet to land now or formerly of The Grace Chapel Assembly of God;

thence proceeding S 66°02'51" W, a distance of thirty three and 00/100 (33.00') feet to a corner;

thence proceeding S 03°18'38" W, a distance of one hundred eighty two and 64/100 (182.64') feet to land now or formerly of Orta Rita Rose, John Horton and Paula A. Horton. The last two herein-described courses are bounded by the said Grace Chapel Assembly of God land;

thence proceeding S 64°20'01" W, a distance of forty three (43'±) feet, more or less to the shore of Omega Pond;

thence proceeding northerly, westerly, southerly and southwesterly along the shore of said Omega Pond, a distance of one thousand one hundred fifty (1,150'±) feet, more or less to land now or formerly of the State of Rhode Island (East Bay Railroad line) and the southwesterly corner of the parcel herein-described;

thence proceeding N 00°25'16" W, a distance of one hundred eighty eight (188'±) feet, more or less to a point of curvature;



Map 303 Block 13 Lots 4 & 5
Roger Williams Ave. & Bourne Ave.
East Providence, Rhode Island

thence proceeding northerly, along an arc of a curve, tangent to the previous course, deflecting to the right having a central angle of $13^{\circ}08'55''$ and a radius of 1001.23'; an arc distance of two hundred twenty nine and $77/100$ (229.77') feet to a point of tangency;

thence proceeding N $12^{\circ}43'39''$ E, a distance of nine hundred fifty four and $06/100$ (954.06') feet to the said southerly street line of Bourne Avenue and the northwesterly corner of the parcel herein-described. The last three herein-described courses are bounded westerly by the said State of Rhode Island land;

thence proceeding S $75^{\circ}47'49''$ E, by and with the said southerly street line of Bourne Avenue, a distance of three hundred seventy one and $59/100$ (371.59') feet to the said westerly street line of Roger Williams Avenue and the point and place of beginning;

The above-described parcel contains 372,600 square feet (8.554 Acres \pm) more or less of land, and may be subject to and benefited by easements and rights of way of record.

EXHIBIT 2A
RESTRICTED PORTIONS OF PROPERTY



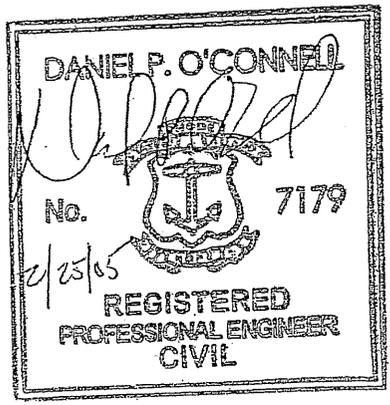
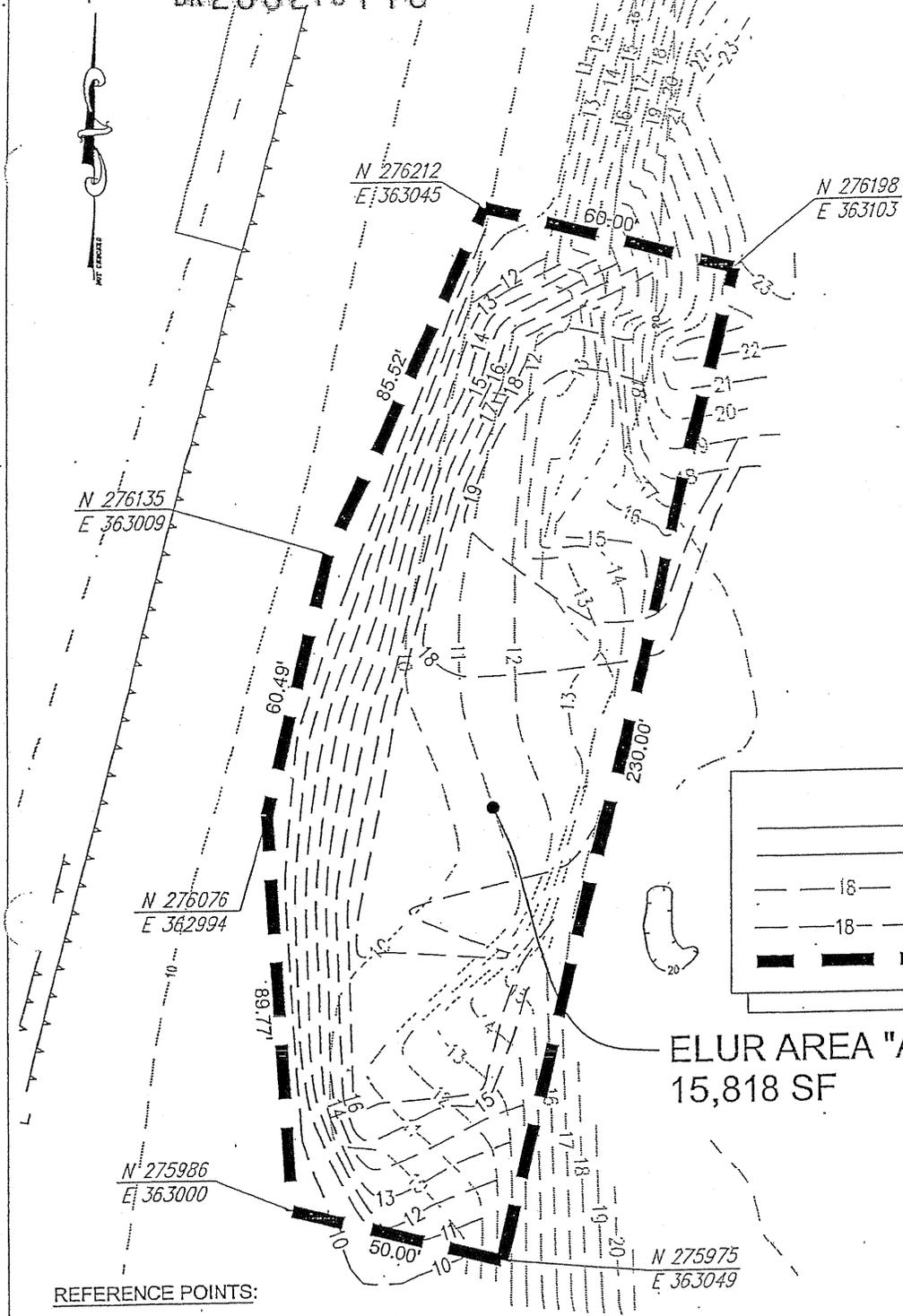
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 TRANSPORTATION
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 MATERIALS TESTING



LEGEND

- PROPERTY LINE
- ABUTTER'S PROPERTY LINE
- EXISTING CONTOUR
- AS-BUILT CONTOUR
- ELUR BOUNDARY

ELUR AREA "A"
 15,818 SF



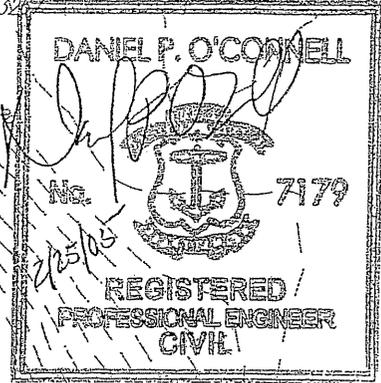
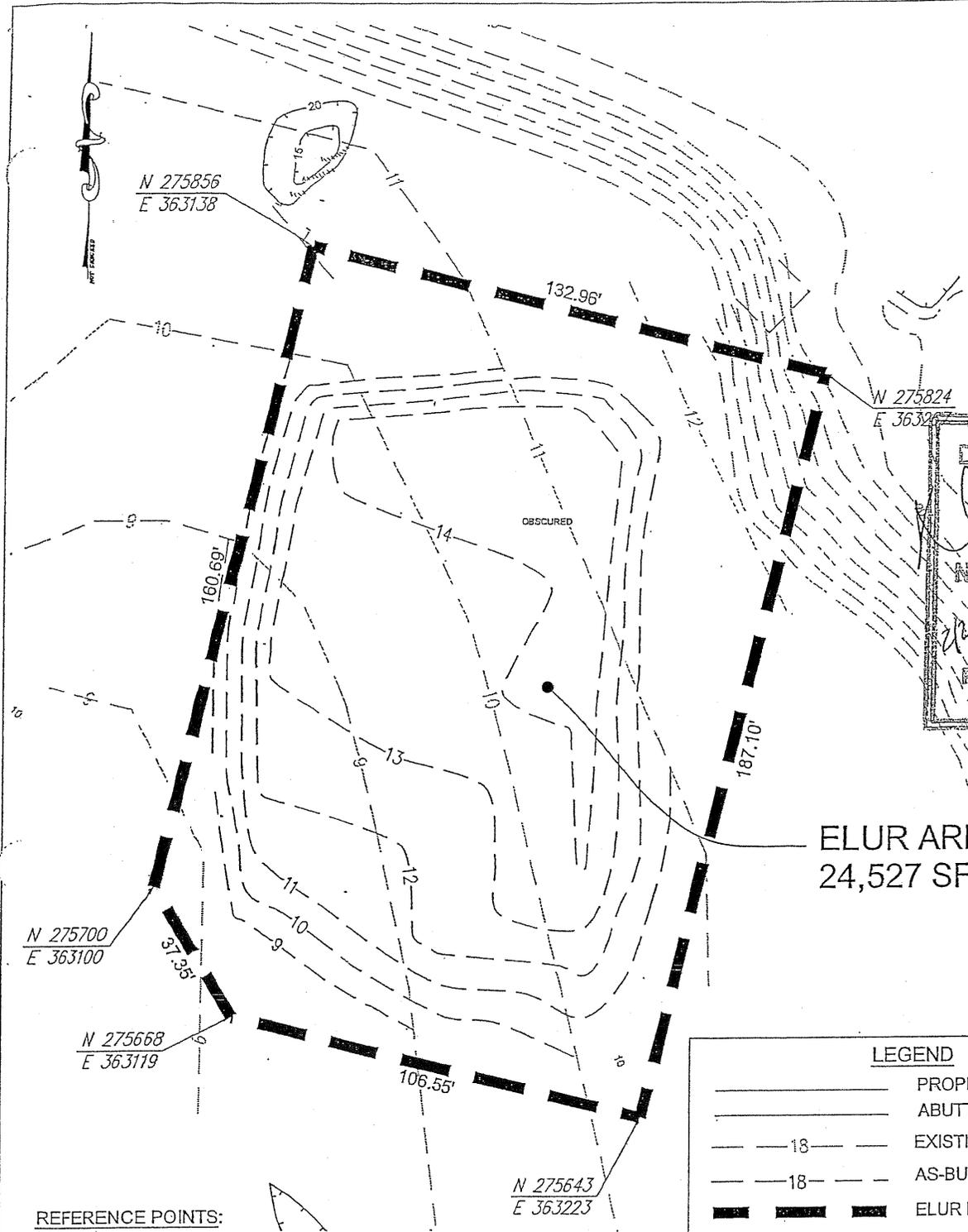
REFERENCE POINTS:

1. RAILROAD BOUND / N 275817, E 363873.
2. BENCHMARK NOAA DISK 3433E AT THE NORTHEAST CORNER OF OMEGA POND BRIDGE
 ELEV: 19.07 (NGVD 29) / N 275387, E 363850

NOTE:

1. THE COORDINATES ARE BASED ON NAD83 STATE PLANE COORDINATES AND WERE PUBLISHED BY GPS SURVEY.

Scale:	1"=40'	Date:	14FEB05	Designed By:	Drawn By:	ACA	Checked By: <i>MPV</i>
Project Title:				Drawing Title:			
EAST POINTE EAST PROVIDENCE, RI				ELUR AREA A AS-BUILT DRAWING			
Issued for:		Drawing Number:		Project Number:			
REPORT		AB-1		03103			



ELUR AREA "B"
 24,527 SF

RECEIVED
MARCH 1, 2022
 COASTAL RESOURCES
 MANAGEMENT COUNCIL

LEGEND	
	PROPERTY LINE
	ABUTTER'S PROPERTY LINE
	EXISTING CONTOUR
	AS-BUILT CONTOUR
	ELUR BOUNDARY

REFERENCE POINTS:

- RAILROAD BOUND / N 275817, E 363873.
- BENCHMARK NOAA DISK 3433E AT THE NORTHEAST CORNER OF OMEGA POND BRIDGE
 ELEV: 19.07 (NGVD 29) / N 275387, E 363850

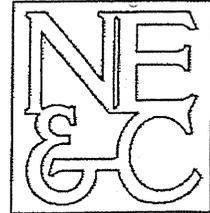
NOTE:

1. THE COORDINATES ARE BASED ON NAD83 STATE PLANE COORDINATES AND WERE PUBLISHED BY GPS SURVEY.

Scale: 1"=40'	Date: 14FEB05	Designed By:	Drawn By: ACA	Checked By: <i>ACA</i>
Project Title: EAST POINTE EAST PROVIDENCE, RI		Drawing Title: ELUR AREA B AS-BUILT DRAWING		
Issued for: REPORT	Drawing Number: AB-2	Project Number: 03103		

BK2662PG120

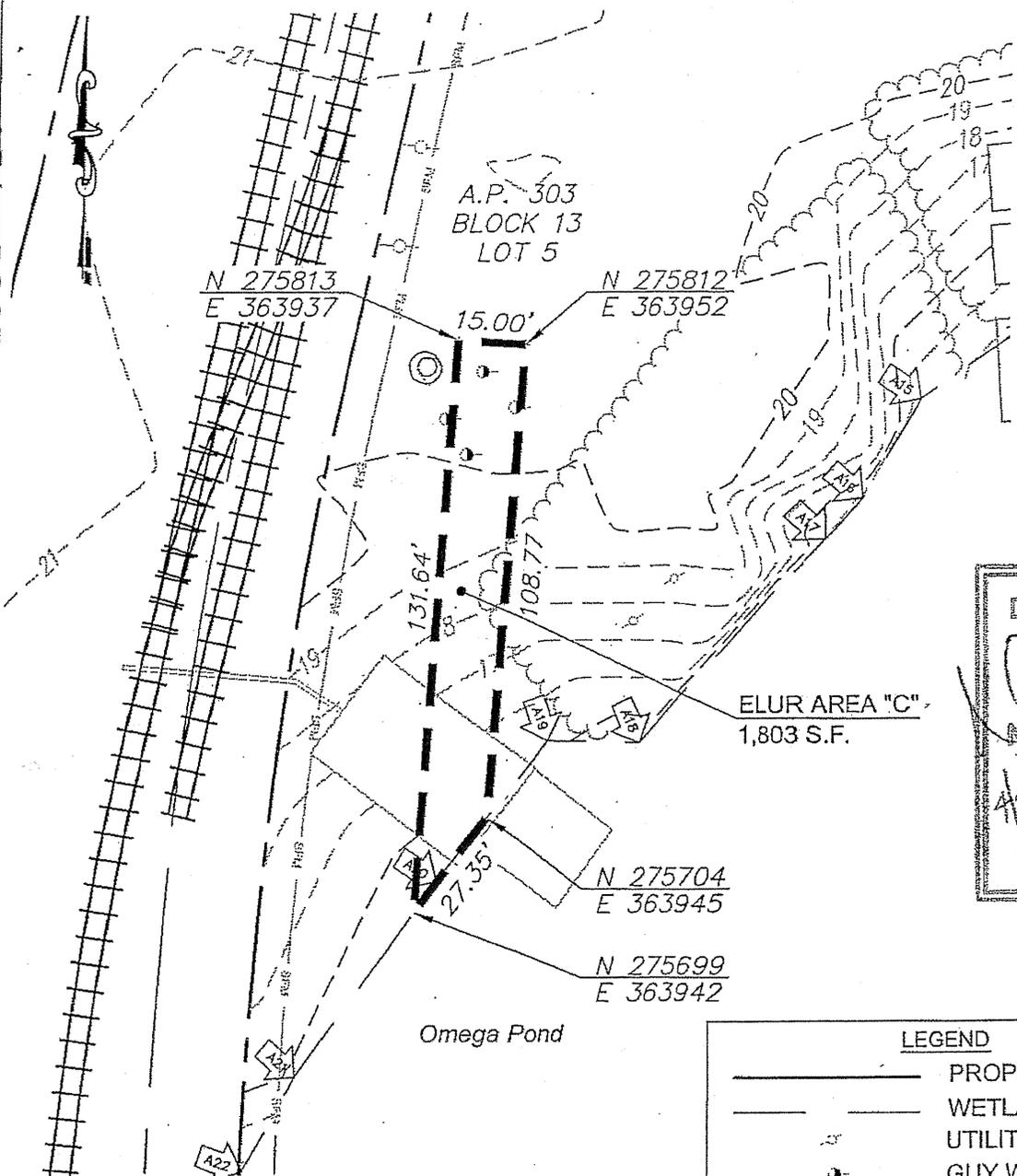
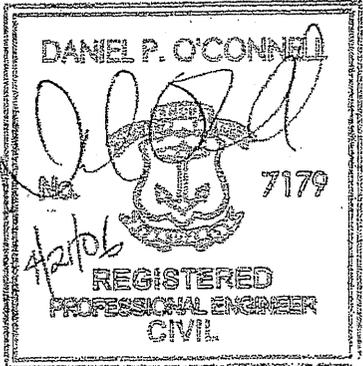
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LEGEND	
	PROPERTY LINE
	WETLAND BORDER
	UTILITY POLE
	GUY WIRE
	ELUR BOUNDARY

REFERENCE POINTS:

- RAILROAD BOUND / N 275817, E 363873.
- BENCHMARK NOAA DISK 3433E AT THE NORTHEAST CORNER OF OMEGA POND BRIDGE
ELEV: 19.07 (NGVD 29) / N 275387, E 363850

NOTE:

- THE COORDINATES ARE BASED ON NAD83 STATE PLANE COORDINATES AND WERE PUBLISHED BY GPS SURVEY.

Scale: 1"=40'	Date: 18APR06	Designed By:	Drawn By: ACA	Checked By:
Project Title: EAST POINTE EAST PROVIDENCE, RI		Drawing Title: ELUR AREA C		
Issued for:	Drawing Number: ELUR	Project Number: 05310		



APPENDIX H UCG MANAGEMENT PLAN





Appendix H:

Urban Coastal Greenway Landscape Maintenance and Management Plan (Revised February 2022):

1. Ownership and Maintenance Responsibilities:

In accordance with Section 210.D. of the Urban Coastal Greenway Design Manual, the Owner of Record of the subject property and its Urban Coastal Greenway (UCG) is responsible for maintaining the landscape of the Urban Coastal Greenway (UCG) in accordance with the operative RICRMC Assent, unless the UCG is transferred to another agent (i.e., the municipality, a land trust, etc.) with that agent's agreement to provide maintenance. The owner of record shall have a direct role in the ongoing maintenance program, consisting of inspection, monitoring, and maintenance of the UCG Landscape

See approved Landscape Plans for Identified Limits of the Subject Project UCG.

2. General Landscape Installation Requirements:

2.1. The existing shoreline is largely manmade fill slope, which drops down to a deteriorated wooden bulkhead at the water line. In addition, there is an abandoned barge at the southwestern tip of the site along with remnants of a wooden piling system along the shoreline to the north. The waterfront area will be reconstructed to provide a new gradually graded public access path, accessible walkways and associated facilities, and necessary low impact development stormwater treatments (see approved grading and drainage plans for the proposed development).

2.2. There are no substantial trees on the Coastal Side of the site. A limited amount of Mature, Native Trees exist immediately along the shoreline of the Pond Side of the Project Site. The small amount of existing vegetation within the proposed UCG area of the Coastal Side of the Project Site will be removed during grading procedures to create the proposed public access and stormwater facilities. The vegetated areas along the shoreline of the Pond Side of the Project Site will be maintained and treated to manage existing invasive plant species and then supplemented with new, additional Native Buffer Plantings (See Coastal Buffer Management Notes Below as depicted on the approved Landscape Plans). As outlined in section 110.B.(a) of the UCG Design Manual this project proposes the complete revegetation of the UCG with non-invasive native and/or sustainable plantings with the exception of approved public access pathways and promenade overlooks.

2.2.1. Coastal Buffer Management Notes (Invasive Plant Management, UCG Buffer Areas):

2.2.1.1. All work and materials shall be in conformance with all Local, State, and Federal Regulations.

2.2.1.2. All proposed invasive management procedures are to be completed by and/or overseen by a Certified Invasive Manager (IM) certified through the RI Coastal Resources Management Council Invasive Plant Management Program. The Owner of Record of the Subject Property and its Urban Coastal Greenway

(UCG) is responsible for securing a Contract with an IM prior to commencement of Management Procedures. The Contract shall be in place for the entire period of construction, as well as during any period of management procedures following site construction.

2.2.1.3. Chemical treatment and control of invasive species:

2.2.1.3.1. Invasive species only shall be treated with herbicide chemical treatment in accordance with all Local, State, and Federal Regulations, and in strict conformance with herbicide manufacturer's specifications for application. A Certified Invasive Manager (IM) will work with the contracted company to confirm only targeted species within the limit of work will be treated/managed. See Existing Landscape Conditions Diagram as depicted on Approved Landscape Plans.

2.2.1.3.2. Only RI State Certified/Licensed Landscape Professionals shall be allowed to utilize chemical herbicides.

2.2.1.3.3. Only water-safe forms of herbicides, as determined and accepted by the RI Coastal Resources Management Council (RICRMC), RI Department of Environmental Management (RIDEM), US Environmental Protection Agency (EPA), US Department of Agriculture, or other Local, State, or Federal Agencies with governance over this project area shall be utilized in chemical treatment and control of invasive species.

2.2.1.3.4. Cut-Stem (Stump) Treatment:

2.2.1.3.4.1. Preferred method of control for woody or bamboo-like invasive species such as Asiatic Bittersweet, Autumn Olive, Japanese Honeysuckle, Japanese Knotweed, Multiflora Rose, Privet, Black Locust, etc. Refer to most recent Rhode Island Natural History Survey (RINHS) and Rhode Island Invasive Species Council (RIISC) listing of invasive plants for plants that are noted to be invasive in Rhode Island.

2.2.1.3.4.1.1. It is understood that invasive status of plants is ever-evolving and habitats of invasive species are constantly in flux. As plants are observed to be invasive this list may change and treatment and suggested control measures/techniques may be adjusted in accordance with the guidance of the CRMC, RIDEM, and RIISC.

2.2.1.3.4.2. Please refer to the URI Cooperative Extension Invasive Plant Management Certification Program and the Michigan Department Of Natural Resources Michigan Natural Features Inventory, 2012, as amended, 'Invasive Species - Best Control Practices' Management Fact Sheets for additional guidance on invasive control techniques:





2.2.1.3.4.2.1. Cut-stem (stump) chemical control treatment: This may be used in any season except during periods of heavy sap flow in the Spring. Refer to herbicide label for specific details. Utilize dyes, where possible to help keep track of which stems have been treated.

2.2.1.3.4.2.1.1. Cut stems approximately 4" above the underlying ground surface , and paint stumps with concentrated herbicide using a small spray bottle or wicking applicator, apply to cut surface up to the edges and just around the sides of the cut stem. On larger stems only apply herbicide to the outer edges of the stem, near the cambium under the outer bark.

2.2.1.3.4.2.1.2. Monitor treated plants following one-year for any resprouting. Treat new stems as needed in accordance with manufacturers' label for specifications on re-application.

2.2.1.3.5. Foliar Spray Treatment:

2.2.1.3.5.1. Preferred method of control for herbaceous or grass-like invasive species such as Phragmites, and Black Swallowwort, etc. Refer to most recent Rhode Island Natural History Survey (RINHS) and Rhode Island Invasive Species Council (RIISC) listing of invasive plants for plants that are noted to be invasive in Rhode Island.

2.2.1.3.5.1.1. It is understood that invasive status of plants is ever-evolving and habitats of invasive species are constantly in flux. As plants are observed to be invasive this list may change and treatment and suggested control measures/techniques may be adjusted in accordance with the guidance of the CRMC, RIDEM, and RIISC.

2.2.1.3.5.2. Please refer to the URI Cooperative Extension Invasive Plant Management Certification Program and the US Department of the Interior Guidance on the Control and Management of Invasive Phragmites (invasives.org), as amended, for additional guidance on invasive control techniques:

2.2.1.3.5.3. Foliar Spray Chemical Control Treatment: This should be done in late Summer after plants are in full bloom, up to the first killing frost.

2.2.1.3.5.4. Spray plants with use of a backpack sprayer or equal close to the leaves using low pressure.



- 2.2.1.3.5.5. Do not utilize spray applications during windy periods, and when wind is a concern. Follow manufacturer's application specifications and labeling.
- 2.2.1.3.5.6. Wait two weeks to allow plant exposure to the herbicide. Reapply if needed in accordance with manufacturer's specifications.
- 2.2.1.3.5.7. Monitor treated plants following one-year for any resprouting. Treat new stems as needed in accordance with manufacturers' label for specifications on re-application.

- 2.3. Following site work, grading, and associated construction needed to provide public access and necessary stormwater facilities, install all pervious walkways and promenade overlooks specified within the UCG. Following installation of these elements, apply plantable soil and loam to the UCG as specified on the approved Landscape Plans.
- 2.4. Install all proposed tree and shrub plantings within the UCG in accordance with lines and details illustrated on the approved Landscape Plans.
- 2.5. Following Tree and Shrub Plantings, Loam and Seed all portions of the UCG, including all proposed stormwater facilities as specified on the approved Grading and Drainage Plans with Coastal Meadow Seed Mix as specified on approved Landscape Plans.

3. Planting Specifications:

- 3.1. The contractor shall perform all work in accordance with all local, state, and federal regulations, and shall obtain all necessary permits for the project.
- 3.2. The contractor shall install all plant material in conformance with the Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition, and the current planting procedures established by the American Nursery & Landscape Association, formerly the American Association of Nurserymen.
- 3.3. All plant material shall meet the American Nursery & Landscape Association (formerly the American Association Of Nurserymen) standards for nursery stock, latest edition, and its amendments. Plant only during seasons normal to the particular variety.
- 3.4. The contractor is responsible for keeping the site clean of miscellaneous debris throughout the construction period. All waste material is to be disposed of immediately to an off-site location, unless otherwise indicated on the plans.

3.5. Maintenance and Warranty:

- 3.5.1. All plantings shall be maintained by the owner or contractor from the time of planting until the plantings are established. Maintenance during this period shall include watering of plantings as necessary to ensure proper establishment of plantings.

- 3.5.2. Contractor shall provide a one (1) year warranty on all new plantings. Should new plant material die (or decline to the point where plant is expected to die) within this warranty period (other than due to natural factors, natural disaster, or neglect), contractor shall remove the plant and replace said plant material with new plantings in accordance with the size and variety specified. All replacement plant material shall carry a new one (1) year warranty starting from the date of replacement. Contractor shall remove all stakes, guy wires, and tape from trees at the end of the specified warranty period.
- 3.6. Final locations of all new plantings shall be adjusted as necessary based on final as-built locations of all new and existing utilities and other site improvements.
- 3.7. Plantable soil: All loam used as plantable soil shall have a sandy loam texture relatively free of subsoil material, stones, roots, lumps of soil, tree limbs, trash, construction debris, or other objectionable material. New planting beds shall be amended with well-aged compost. Loam shall be amended with compost as needed to produce a plantable soil containing a minimum of 10% organic matter. On-site native loam may be utilized for plantable soil, but shall be amended, screened, and/or raked as necessary to conform to the requirements of any off-site loam.
- 3.8. Compost: Shall be a well decomposed, stable, weed free organic matter source. It shall be derived from agricultural, food, and/or yard trimmings. The product shall contain no substances toxic to plants and shall be reasonably free (less than 1 percent by dry weight) of man-made foreign matter.
- 3.9. Watering: Thoroughly water all plants when 2/3 of backfill has been placed to ensure all air pockets are removed. Firmly tamp soil around plant. Ensure proper watering of plant material until establishment (once per day for 14 days following installation, or as needed depending on frequency and quantity of natural rain fall). Monitor soil moisture within rootzone of plantings prior to and following each watering procedure. Do not overwater or saturate rootzone of plantings for prolonged period of time.
- 3.10. Pruning: All planting material shall be pruned in accordance with good horticultural practices, and in such a manner as to maintain the natural form of the plant. Pruning shall be completed utilizing only clean sharp tools. Use of axes for pruning is unacceptable. Prune all plant material to remove any and all deadwood and crossing branches.
- 3.11. Mulch: All Shrub and Tree Plantings shall be mulched as indicated on detail drawings. Plantings installed in clusters, or within planting beds shall be mulched as such, installing mulch throughout the entire planting bed. Mulch to be 3"-4", or as otherwise noted, in depth and reduced to less than 1" at root flare of each plant.
- 3.11.1. Bark mulch, where indicated, shall be well-aged, shredded bark mulch, natural dark brown in color and non-dyed, or as approved by owner's representative.



3.12. Loam and Seed:

3.12.1. Loam and seed all disturbed areas. All new lawn areas subject to erosion shall be stabilized utilizing jute mesh or approved equal.

3.12.2. Loam utilized for lawn areas shall be sandy loam, 4"-6" in depth, and conforming to the requirements of the USGA for lawn plantings. It shall be free of subsoil, refuse, stumps, roots, rocks, cobbles, stones, brush, noxious weeds, litter, and other materials which are larger than ½-inch in any dimension and which will prevent the formation of a suitable seed bed. The loam shall have an acidity range of 6.5 pH to 7.5 pH. Loam shall possess good filtration and permeability rates and shall conform to the requirements defined in section M.18.01 of the RIDOT Standard Specifications.

3.12.2.1. Contractor shall test soil pH prior to installation of seed. If required to meet the specified acidity range, contractor may utilize lime or sulfur as necessary to adapt the soil acidity level. On-site native loam may be utilized for lawn areas, but shall be amended, screened, and/or raked as necessary to conform to the requirements of any off-site loam.

3.12.3. If installing seed utilizing hydroseeder device, provide fiber mulch and starter fertilizer mix.

3.12.4. If broadcast seeding, topdress with 2" straw mulch and starter fertilizer or fiber mulch and starter fertilizer mix (no seed), following spreading of seed.

3.12.5. Seed Mixes:

3.12.5.1. Lawn Areas Outside of UCG: Seed Mix shall be similar to 'Endophyte Enhanced Mix' As available through Allen's Seed, Exeter, RI, or equal, Drought Tolerant, Deep-Rooting Grass Seed, Containing a minimum of 30% by weight of Turf-Type Tall Fescue.

3.12.5.2. UCG Seed Mix: Seed Mix utilized for Coastal Meadow Grasses areas shall be similar to RI State Native Mix, as available through Allen's Seed, Exeter, RI, or approved equal, comprised of the following:

- 30% Hard Fescue
- 25% Perennial Rye
- 25% Little Bluestem
- 20% Switchgrass

4. Ongoing UCG Landscape Inspection, Monitoring, and Maintenance Requirements:

4.1. Monitoring Procedures:

4.1.1. Following construction procedures and the installation of all proposed plant material, establishment of these plantings shall be allowed to occur naturally. Site



Inspections of the UCG Landscape Components shall occur a minimum of two (2) times per year. First inspection shall occur between March 15th and May 15th, and the second inspection shall occur between October 15th and November 30th of the same calendar year. Inspections shall consist of general review of plant health, general review of any damage or wear of landscape elements such as public access path or promenade surfacing and site furnishings, and review of any invasive weed plant growth in and around the UCG.

4.1.2. In addition, and for a minimum period of two (2) years, all plantings, pedestrian surfacing, and site furnishings shall be monitored once a year and following major storm events (10-year storm event or greater) by a qualified landscape professional acting as the owner's representative. This Qualified professional shall report status of plant establishment and identify any and all plants which may be in need of replacement. Replacement plantings shall be installed in the next growing season.

4.2. Should invasive species be observed within this area during monitoring, they will be controlled using a combination of approved mechanical and biological methods, as well as other methods appropriate for use within or near wetlands. Invasive control methods will be determined on a species-by-species basis according to information provided by the Invasive Plant Atlas of New England (IPANE), the Rhode Island Invasive Species Council, and/or the RI Natural History Survey (RINHS). See Coastal Buffer Management Notes (Invasive Plant Management, UCG Buffer Areas) notes above.

5. Ongoing UCG Landscape Maintenance and Management

(See Section 200.D. of the UCG Design Manual):

5.1. For required maintenance and inspections of vegetated stormwater management practices, see the Stormwater Section (Section 300) of the UCG Design Manual and approved Project Stormwater System Operations and Maintenance Plan, entitled, 'Stormwater System Operations and Maintenance Plan "East Point" Proposed Multifamily Development, Roger Williams Avenue, East Providence, RI', as amended, Prepared by Northeast Engineers and Consultants, Inc.

5.2. Surfacing and Site Furnishings: At each inspection, provide a visual inspection of UCG pedestrian Surfacing and Site Furnishings. Should damage be observed, notify the Owner immediately and provide recommendations for repair and/or replacement of damaged materials. If observed damage pose a danger to the public, then utilize temporary site controls to limit or deter access to public until damage can be repaired. Repairs should occur as soon as practical to avoid extended periods of reduced access to UCG components by the public.

5.2.1. Stonedust and Permeable Walkway Maintenance: Upon inspection, should stonedust or permeable walkway surfacing be damaged or exhibit wear that affects the accessibility of the surfacing, they shall be repaired with similar or in-kind materials in accordance with the installation details and materials specified on the approved Landscape Plans. Care should be taken to use products suitable for use on precast concrete permeable pavers when applying ice melt or cleaning said surface.



5.3. Pruning and Weeding:

- 5.3.1. Whenever possible use mechanical methods of vegetation removal (e.g., mowing with tractor-type or push mowers, hand cutting with gas or electric powered weed trimmers) rather than applying herbicides. Use hand weeding where practical.
- 5.3.2. Avoid loosening the soil when conducting mechanical or manual weed control, as this could lead to erosion. Use mulch or other erosion control measures when soils are exposed.
- 5.3.3. Place temporarily stockpiled material away from watercourses, and berm or cover stockpiles to prevent material releases to storm drains.
- 5.3.4. All pruning shall be completed in accordance with good horticultural practices, and in such a manner as to maintain the natural form of the plant. Pruning shall be completed utilizing only clean sharp tools. Use of axes for pruning is unacceptable
- 5.3.5. Pruning of Trees and Shrubbery: If during Site Inspections, pruning is deemed necessary for plant health or pedestrian safety, due to disease or natural factors such as wind or animal/Insect damage, or exhibit concerning damage such as broken limbs, damaged bark, etc., proposed action(s) to rectify the concerns shall be proposed to Project Operator immediately for implementation as soon as practical:
 - 5.3.5.1. Animal/Insect Damage: If plant has been damaged to the point of plant failure, plant shall be replaced in-kind with new plant similar in size and variety as that which was originally specified on approved plans. If damage is limited in nature and long-term health and efficacy of the plant (s) is not in danger, then animal damage can be pruned or repaired using mechanical means. Future animal damage can be deterred through use of natural animal repellants, such as 'Evergaurd Repellents Deer and Rabbit Eco Friendly Repellent', or equal, applied by a certified technician.
 - 5.3.5.2. Wind or Similar Damage: If plant has been damaged to the point of plant failure, plant shall be replaced in-kind with new plant similar in size and variety as that which was originally specified on approved plans. If damage is limited in nature and long-term health and efficacy of the plant(s) is not in danger, then damage can be pruned or repaired using mechanical means.
- 5.3.6. Weeding or Invasive Plant Removal: Should Inspections note required Weeding or Invasive Plant Removal, then such work shall be conducted by a qualified landscape professional and under the direction or inspection of a Certified Invasive Manager (IM). Weeding and Invasive Plant Removal shall be completed using mechanical means such as digging or pulling or temporary mechanical smothering means. Alternatively, in Coastal Meadow Areas Invasive Plant Removal can be completed using "Top-Clip" Mowing Method. Chemical Pesticides, Fungicides, and herbicides shall be utilized only as a last resort and in accordance with all Local, State, and Federal Regulations. See

Coastal Buffer Management Notes (Invasive Plant Management, UCG Buffer Areas)
notes above.



- 5.3.6.1. "Top-Clip" Weeding (mowing above the native grass seedlings). This can be done in the second year of establishment in the Spring/Early Summer. If needed, Top-Clipping can be done by mowing the meadow areas when they reach 12"-18" in height. Mow the entire meadow to a height of no less than 6". This will prevent the weeds from going to seed. A second mowing may be needed depending on weed response. This second mowing should occur in the late summer (after August 1), mowed to a height of no less than 12". The following Spring after this process mow the whole meadow in early Spring (early May), close to the ground (4" +/-), allowing the soil to warm quicker and the young native meadow plants to emerge more quickly.

5.4. Mowing of Coastal Meadows and Mowed Public Access Pathways:

- 5.4.1. Public Access Pathways within the UCG shall be mowed weekly during the growing season, or as needed to ensure a grass blade height of approximately 2.5" – 4" in height. Whenever possible, mow access paths when needed to remove approximately the top 1/3 of the grass blade. When possible, mulch and leave clippings on the lawn surface to allow clippings to degrade and release stored nutrients back to the soil.
- 5.4.2. Coastal Meadow Areas shall be mowed 1 time annually (1-2 times maximum annually if necessary to ensure meadow grass height) to maintain meadow and prevent encroachment of woody vegetation into the designated meadow areas. If possible, the meadow areas should not be mowed to a height of less than 8" and in in the late Fall or early Spring. When possible, mulch and leave clippings on the meadow surface to allow clippings to degrade and release stored nutrients back to the soil.
- 5.4.3. Maintained Lawn Areas outside of the UCG shall be mowed weekly during the growing season, or as needed to ensure a grass blade height of approximately 2.5" – 4" in height. Whenever possible, mow Lawn Areas when needed to remove approximately the top 1/3 of the grass blade. When possible, mulch and leave clippings on the lawn surface to allow clippings to degrade and release stored nutrients back to the soil.

5.5. Waste Management:

- 5.5.1. Leaves, sticks, or other collected vegetation should be disposed of by appropriate means as leaf and yard waste. Do not dispose of collected vegetation into waterways or storm drainage systems.
- 5.5.2. Place temporarily stockpiled material away from water bodies and storm drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system or water bodies.
- 5.5.3. Minimize the use of high nitrogen fertilizers that produce excess growth requiring more frequent mowing or trimming.



5.5.4. Avoid landscape wastes in and around storm drain inlets by using bagging equipment or by manually picking up the material.

5.6. Irrigation:

5.6.1. Landscape irrigation needs have been minimized through plant selection and placement, including grass/meadow/lawn plantings. Properly sited native or sustainable plants should require minimal irrigation once established.

5.6.2. If irrigation is required for lawn areas either during establishment period or due to drought conditions, follow any local, state, or federal watering restrictions which may be in place and limit irrigation to no more than one (1) inch of water per week. If at all possible, irrigating of lawn areas shall be conducted in the early morning hours (prior to 9:00am) to minimize evaporation.

5.6.3. Where irrigation is necessary during establishment of new plantings or periods of extreme drought, utilize practices and equipment that promote water conservation, such as drip irrigation, soaker hoses, timers, and moisture sensors. Refer to the RI Native Plant Guide (<https://web.uri.edu/rinativeplants/>) and the CRMC/URI Coastal Plant List for individual plant species characteristics and requirements.

5.7. Fertilizer and Pesticides (Generally):

5.7.1. Minimize fertilizer and pesticide use to the greatest extent possible through proper plant selection and placement.

5.7.2. Do not use fertilizers or pesticides if rain is expected within the following 24 hours. Apply fertilizers and pesticides only when wind speeds are low (less than 5 mph)

5.7.3. Calibrate fertilizer and pesticide application equipment to avoid excessive application.

5.7.4. Incorporate fertilizers into the soil where possible, rather than broadcasting onto the surface.

5.7.5. After application, sweep fertilizer spilled on hard surfaces such as pavement back onto lawn surfaces (never hose it off). Do not sweep fertilizer into gutters or stormdrains.

5.7.6. Periodically test soils to determine fertilizer needs.

5.7.7. Utilize a comprehensive management system that incorporates integrated pest management (IPM) techniques (visit the Northeastern IPM Center's website at www.northeastipm.org for resources).

- 5.7.8. Use pesticides only if there is an actual pest problem (not on a regular preventative schedule).
- 5.7.9. Do not mix or prepare pesticides for application near storm drains or within 50 feet of the shoreline or edge of a surface water body.
- 5.7.10. Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pest.
- 5.7.11. Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
- 5.7.12. Triple rinse containers and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- 5.7.13. Dispose of empty pesticide containers according to the instructions on the container label.
- 5.7.14. In cases where microscopic parasites, such as bacteria, fungi, or viruses may be present or observed, which are causing damage to plants, the affected plant material can be removed and disposed of. All pruning equipment should then be disinfected with bleach or similar and cleaned thoroughly to prevent spread of the parasite.



APPENDIX I WETLAND BIOLOGIST NARRATIVES



Natural Resource Services, Inc.

October 27, 2020

Geralyn Small, PE
Northeast Engineers & Consultants, Inc.
6 Valley Road
Middletown, RI 02842

RE: Coastal Feature and Freshwater Wetland Delineation
300 Bourne Ave; AP. 303, Block 13, Lots 4&5 and A.P. 203, Block 1, Lot 4
East Providence, Rhode Island

Dear Ms. Small:

Natural Resource Services, Inc. (NRS) has completed the coastal feature delineation and freshwater wetland delineation within the above referenced properties. This field work conforms to the policies and definitions for the identification of physiographic features found in the RI Coastal Resources Management Program (CRMP) (650 RICR-20-00-01). These regulations are administered by the Coastal Resources Management Council (CRMC). The CRMP states that any coastal feature delineation established by a consultant must be verified by the CRMC staff before being considered accurate for regulatory purposes. Additionally, the wetland delineation was established in accordance with the standards outlined in Appendix 2 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (250 RICR 150-15-1). These land-use regulations are administered by the RI Department of Environmental Management (DEM), Office of Water Resources (OWR). It is important to note that in accordance with Section 1.8 (C)(4) of these regulations, all delineations performed by wetland consultants are not considered to be accurate for state regulatory purposes until the work is reviewed and approved by the DEM, OWR.

As part of our work, a hand-held GPS unit was used to locate the established coastal feature and wetland flagging. While this location work should not be construed as a professional survey, the data obtained is valuable for preliminary planning purposes. An aerial photograph is attached to this letter. The GPS data has been added as an overlay on the photo to provide a visual representation of the established delineation. This fieldwork was completed by Edward Avizinis, PWS, CPSS, on October 16th, 2020.

The property has an address of 300 Bourne Avenue in East Providence. The town tax assessor database cites the lots as being vacant and combined an approximate 27.73 acres in size. According to an NRS remote sensing review of the RI DEM – Environmental Resource Maps, the lots were occupied by commercial/industrial structures from the earliest available photographs taken in 1939 until sometime in the early 2000's. Photographs from 2008 to present show the land as vacant. The lots also fall within the area identified as the Metro Bay Special Area Management



Plan (SAMP). The RI DEM – Environmental Resource Map also shows the southern portions of the parcel mapped within a Natural Heritage Area.

The subject parcel spans multiple lots that occur south of Bourne Avenue and west of Roger Williams Avenue. There is a railway that bisects the properties that travels along the Seekonk River. The lot to the west of railway is within the jurisdiction of CRMC and the lot to the east of the railway is within jurisdiction of the DEM. There is a dam which the railway passes over to the south of the property. This dam is the dividing feature between Omega Pond (DEM – Freshwater) and the Seekonk River (CRMC – Coastal).

The top of bank and man-made shoreline represents the coastal feature on the western lot. This is easily identifiable on the plan and therefore was not flagged as the survey location of the top of bank is sufficiently accurate. CRMC maintains jurisdiction within 200-feet of the coastal feature including on the properties within DEM jurisdiction east of the railway. For commercial/industrial projects, the coastal regulations regarding buffer zones consider each project on a case by case basis. Any proposed alterations within the 200-foot jurisdiction will require a review from CRMC.

On the lots to the east, NRS has delineated the extent of Omega Pond and associated wetlands on the property. Flagging labeled A1 – A33 defines the limit of a pond as classified under the DEM regulations. Ponds require the application of a 50-foot perimeter wetland. This is an adjacent upland area considered to be important to the protection of the wetland.

It is important to note that a new state freshwater wetlands law was enacted in July of 2015. This law made changes to the jurisdictional limits currently utilized in the regulations. The Department of Environmental Management (DEM) is writing new regulations pursuant to this statute which will require buffer zones for all freshwater wetlands. While a comprehensive timeline has not been established for the enactment of these rules, it is anticipated that they will be in effect at some point in 2021. If you submit an application for development prior to the promulgation of these rules, your project would then be grandfathered under the current wetland regulations and not subject to any new standards.

Please do not hesitate to contact me if you have questions regarding the field work performed or this letter of findings.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Scott P. Rabideau".

Scott P. Rabideau, PWS
Principal

Enclosure

Legend

- Approximate Site Location (GIS)
- ▲▲ Approximate Wetland Delineation (DEM)
- - - Approximate 50 ft Perimeter Wetland (DEM)
- Approximate Coastal Feature, Unflagged (CRMC)
- - - Approximate 200 ft. Jurisdiction (CRMC)



Type 4

200'

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MARCH 1, 2022

COASTAL RESOURCES
MANAGEMENT COUNCIL

FOR ILLUSTRATIVE PURPOSES ONLY
NOT A SURVEY PLAN

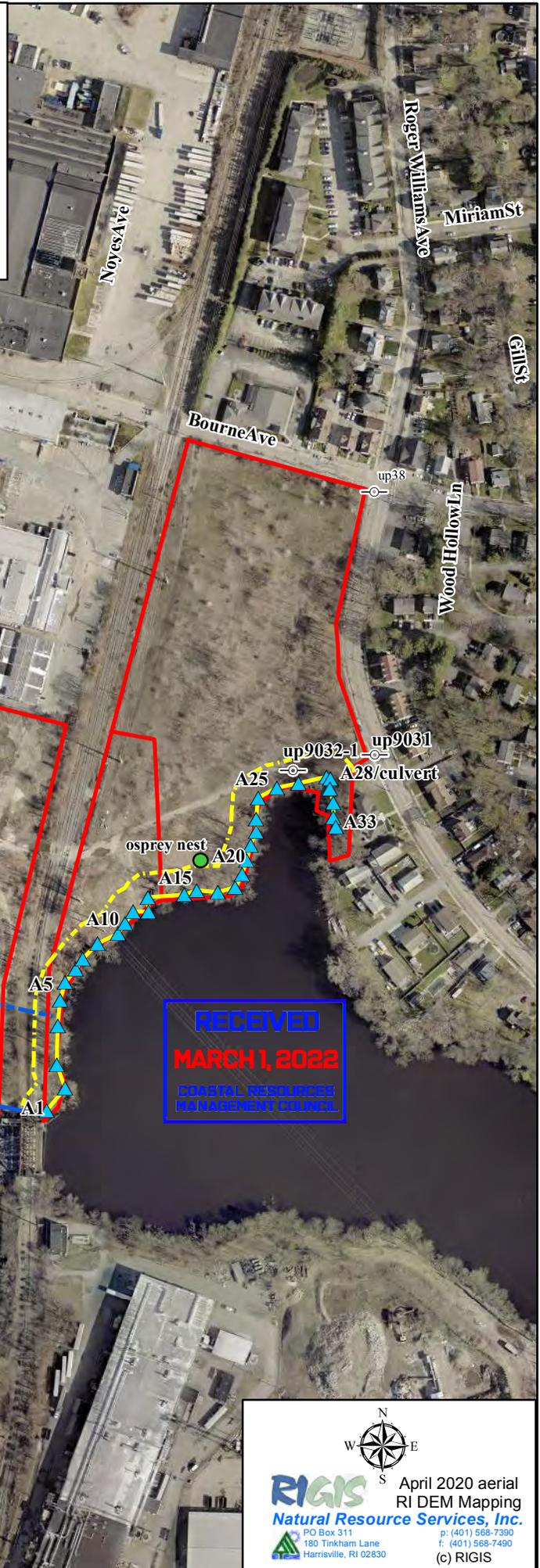
**Site Sketch Depicting Approximate
Coastal Feature and Wetland Delineation**
300 Bourne Ave
A.P. 303, Block 13, Lots 4 & 5
A.P. 203, Block 1, Lot 4
 East Providence, RI

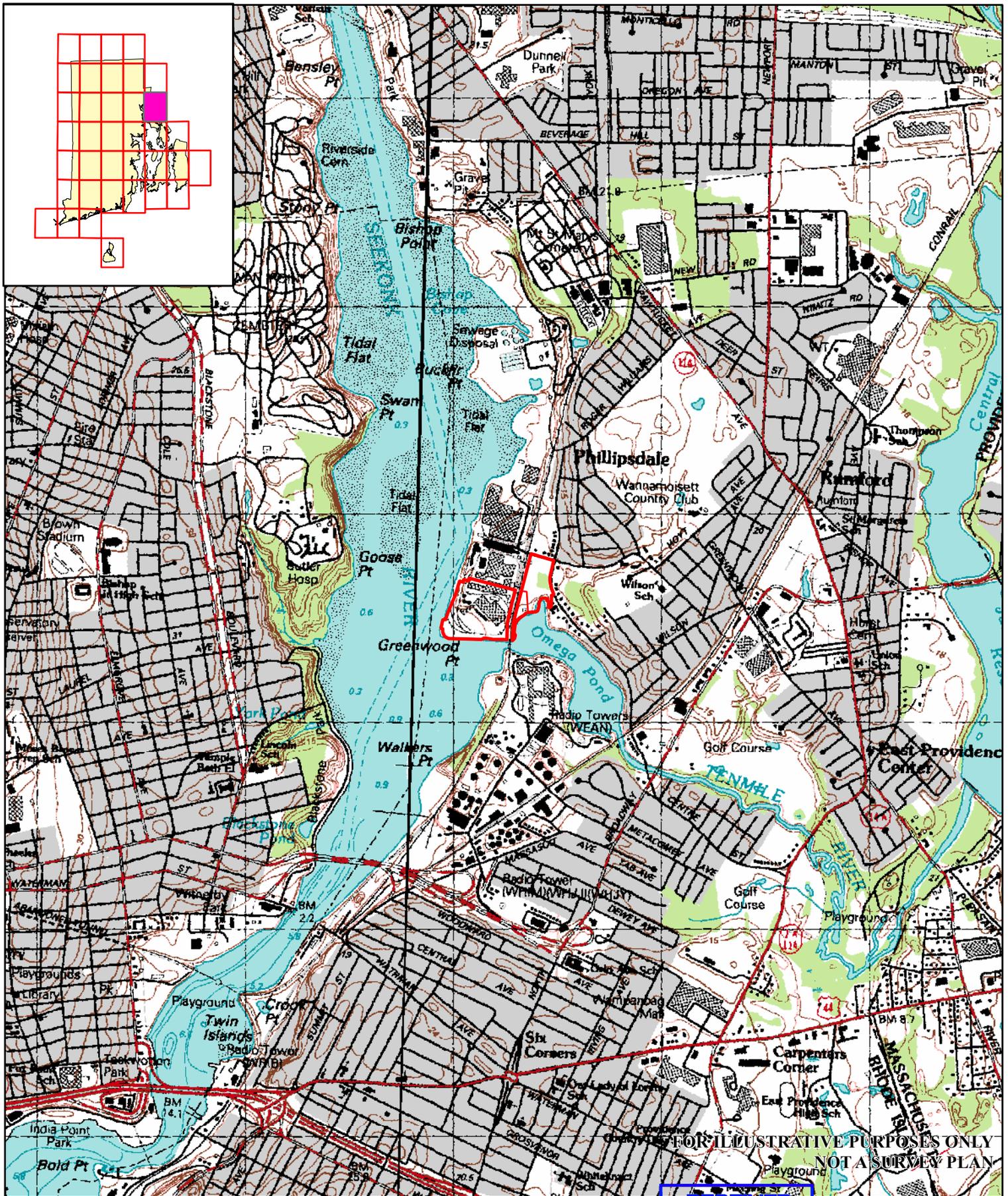
Performed by:
 Edward Avizinis, PWS, CPSS - 10/16/2020
 Located using a handheld Trimble GeoXH

April 2020 aerial
RI DEM Mapping

RIGIS Natural Resource Services, Inc.

PO Box 311 p: (401) 568-7390
 180 Tinkham Lane f: (401) 568-7490
 Harrisville, RI 02830 (c) RIGIS

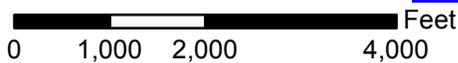




USGS Topographic Map
300 Bourne Ave
A.P. 303, Block 13, Lots 4 & 5
A.P. 203, Block 1, Lot 4

East Providence, RI

— Approximate Site Location
 USGS Topographic Series
 Contour Interval 10 Feet
 National Geodetic Vertical Datum of 1929



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MARCH 1, 2022
COASTAL RESOURCES
MANAGEMENT COUNCIL

Natural Resource Services, Inc.
 PO Box 311
 180 Tinkham Lane
 Harrisville, RI 02830
 p: (401) 568-7390
 f: (401) 568-7490
 (c) RIGIS

FOR ILLUSTRATIVE PURPOSES ONLY
 NOT A SURVEY PLAN



Wetland Edge Delineation Data Form (WETLAND)

Applicant:

Wetland No.

Project: 300 Bourne Ave

Flag No. Sequence: A1 - A33

City/Town: East Providence

Date: 10/16/2020

Vegetation: List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1. Acer rubrum	FAC	1. Polygonum cuspidatum	FACU
2. Salix cinerea	FACW	2.	
3. Quercus rubra	FACU	3.	
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Vaccinium corymbosum	FACW	1. Smilax rotundifolia	FAC
2. Clethra alnifolia	FAC	2. Celastrus orbiculatus	UPL
3. Lonicera morrowii	FACU	3. Lonicera japonica	FACU

List other vegetative species noted which may have affected determination of the wetland edge: _____.

Soil: SCS Soil Survey Mapping Unit: W
On Hydric Soils List? (Y/N) Yes

Soil Profile (Note wetland flag no. nearest soil test pit): A15

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
A	0-8	10YR 2/1			
Cg	8-10	2.5Y 5/1			

Other hydrological indicators (e.g. water marks, drainage patterns, root rhizospheres, etc.; see Appendix 4(A)(4) of the Rules): Staining, buttressed roots

Landscape position: Toeslope
Altered/atypical situation? (describe) _____

Comments: _____



Wetland Edge Delineation Data Form (UPLAND)

Applicant:

Wetland No.

Project: 300 Bourne Ave

Flag No. Sequence: A1 - A33

City/Town: East Providence

Date: 10/16/2020

Vegetation: List the three dominant species in each vegetative strata along with their NWI status:

<p><u>Tree</u></p> <ol style="list-style-type: none"> 1. <i>Quercus rubra</i> 2. <i>Ailanthus altissima</i> 3. 	<p>Indicator <u>Status</u></p> <p>FACU UPL</p>	<p><u>Herbs</u></p> <ol style="list-style-type: none"> 1. 2. 3. 	<p>Indicator <u>Status</u></p>
<p><u>Saplings/Shrubs</u></p> <ol style="list-style-type: none"> 1. <i>Lonicera morrowii</i> 2. <i>Rhus typhina</i> 3. <i>Rubus allegheniensis</i> 	<p>FACU - FACU</p>	<p><u>Woody Vines</u></p> <ol style="list-style-type: none"> 1. <i>Smilax rotundifolia</i> 2. <i>Vitis labrusca</i> 3. <i>Celastrus orbiculatus</i> 	<p>FAC FACU UPL</p>

List other vegetative species noted which may have affected determination of the wetland edge: Rosa multiflora, Rubus phoenicolasius

Soil: SCS Soil Survey Mapping Unit: UR
On Hydric Soils List? (Y/N) No

Soil Profile (Note wetland flag no. nearest soil test pit): A15

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
HTM	0-12				

Other indicators exhibiting an absence of wetland hydrology (e.g. absence of water marks, lack of redoximorphic features, lack of oxidized rhizospheres, etc.):

Landscape position: Shoulder slope
Altered/atypical situation? (describe)

Comments:

December 7, 2020

Lyn Small, PE
Northeast Engineers and Consultants, Inc.
6 Valley Road
Middletown, Rhode Island 02842



Subject: Wetland Delineation
Roger Williams Avenue
Map 303, Block 1, Lot 4
East Providence, RI 02914

Dear Ms. Small:

This letter presents my findings regarding wetlands investigation at Roger Williams Avenue, Map 303, Block 1, Lot 4 in East Providence, Rhode Island. The investigation was done in accordance with the Coastal Resources Management Council's (CRMC) Coastal Resources Management Program (CRMP). This property also falls with the CRMC's Metro Bay Region Special Area Management Plan (SAMP). My qualifications include over 24 years' experience in the practice of wetland science and environmental impact assessment. I am a Professional Soil Scientist with the Society of Soil Scientists of Southern New England (SSSSNE) and a Professional Wetland Scientist (#2010) certified by the Society of Wetland Scientists (SWS).

The subject property is located on the western side of the existing railroad track, west of the existing dam. The western and southern property boundaries are adjacent to the Seekonk River, identified as CRMC Type 4 waters. Coastal Wetland delineations, represented by flag series CF1 – CF33, were performed on November 19, 2020, and consists of man-made shoreline and top of bluff. This entire property and Coastal Feature have been subject to development and demolishing activities. The table below identifies the flag numbers and their specific classification features:

<u>M&A Flag Series</u>	<u>Classification Feature</u>
CF1 – CF4	Man-made Shoreline - Top of concrete block wall/associated top of bluff (fill slope)
CF4 – CF8	Top of bluff (fill slope) associated with marsh
CF8 – CF12	*see below
CF12 – CF33	Top of Bluff (fill slope)

*The area identified with flags CF8 – CF12 occurs at the edge of marsh vegetation dominated by hightide bush and panic grass. There is a shallow slope landward of these flags; therefore, the top of that slope was not identified as the Top of Bluff due to the apparent lack of a 3:1 or steeper slope. However, due to the historical disturbances on this property, it is unclear in the field if this specific portion of the delineation was disturbed more recently; please note that CRMC may consider the Top of Bluff slightly more landward in this location.

Due to the existing disturbed nature of the property, filing a CRMC Preliminary Determination application is recommended in order to allow the CRMC to review the location of the Coastal

L. Small
December 2020

Features in order to verify these locations and classifications. This application will also allow the CRMC to confirm the jurisdictional setbacks on the property and to determine the overall feasibility of the project so that it conforms to all associated regulations set out by the CRMP and Metro Bay SAMP.

Please note that only the CRMC can determine what is to be known as Coastal and Freshwater Wetland in the Vicinity of the Coast in Rhode Island. As such, the information provided herein represents the best professional judgement of Mason & Associates, Inc., and should not be construed to represent the finding of any regulatory agency.

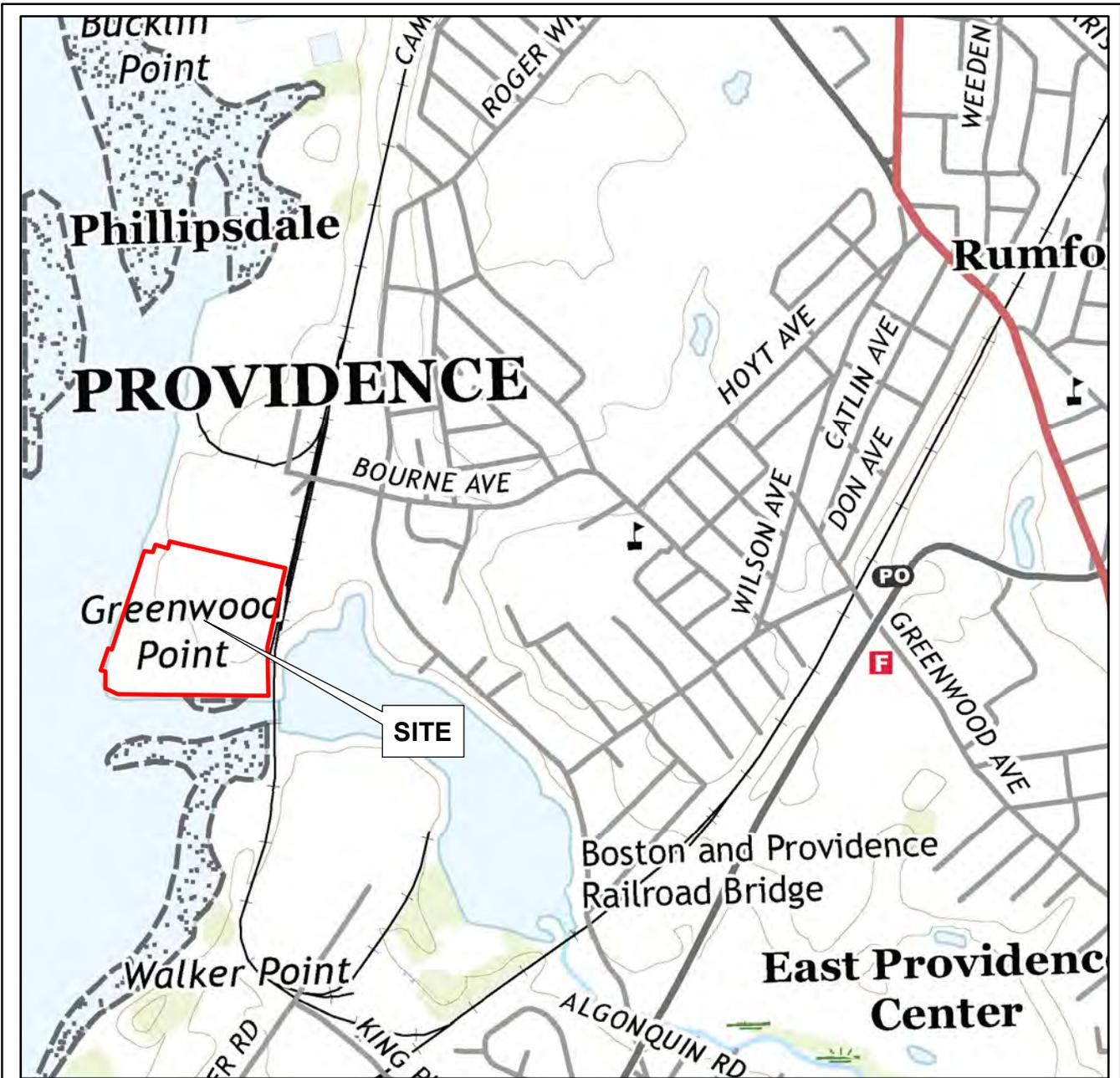
Thank you for the opportunity to work with you on this project. Please contact us if you have any questions regarding this work, or if you require additional information.

Sincerely yours,
MASON & ASSOCIATES, INC.



Joseph P. McCue
Senior Environmental Scientist

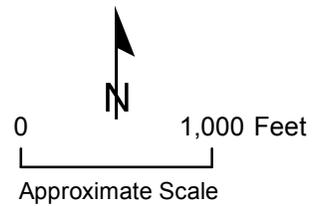
- Figure 1: Site Location
- Figure 2: Approximate Location of Wetlands



Sources: 2018 USGS Topographic Map for East Providence, RI

Approximate Location:

 SiteBoundsRI



East Pointe Development
East Providence, Rhode Island

MA MASON & ASSOCIATES, INC.
Environmental Consulting & Projects
771 Plainfield Pike, North Scituate, Rhode Island 02857

SITE LOCATION

Project No. 201103

Figure 1



Sources: RIGIS 2019 Digital Color Orthophotography

Approximate Location:

 Site

 Flagged Coastal Feature to be survey located

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 MANAGEMENT COUNCIL

East Pointe Development
 East Providence, Rhode Island

MA **MASON & ASSOCIATES, INC.**
Environmental Consulting & Projects
 771 Plainfield Pike, North Scituate, Rhode Island 02857

**APPROXIMATE LOCATION
 OF WETLANDS**

Project No. 201103

Figure 2

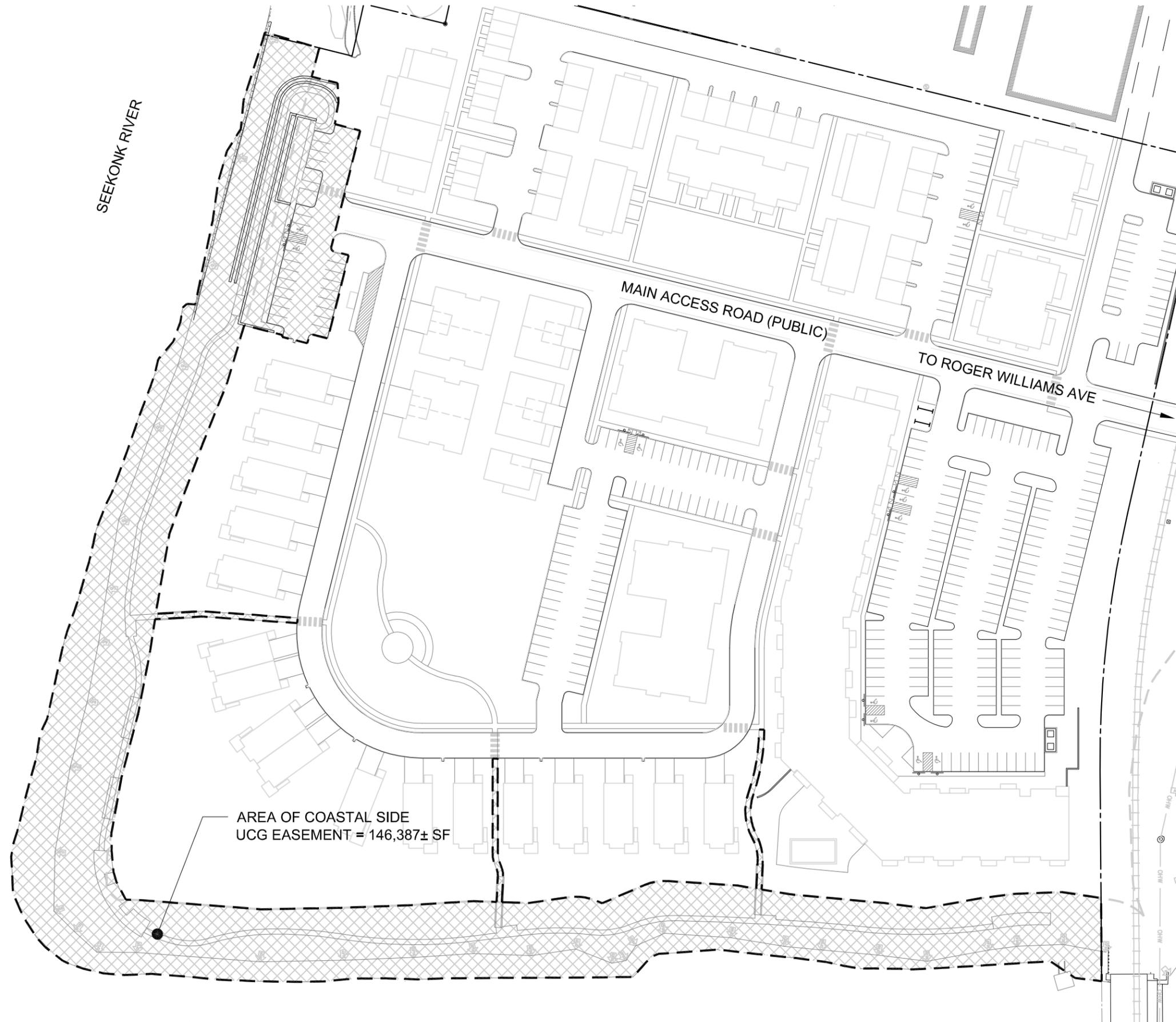


APPENDIX J UCG EASEMENT PLANS AND DRAFT DOCUMENTATION



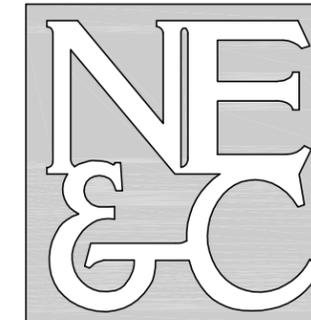


SEEKONK RIVER



AREA OF COASTAL SIDE
UCG EASEMENT = 146,387± SF

NORTHEAST ENGINEERS
& CONSULTANTS, INC.



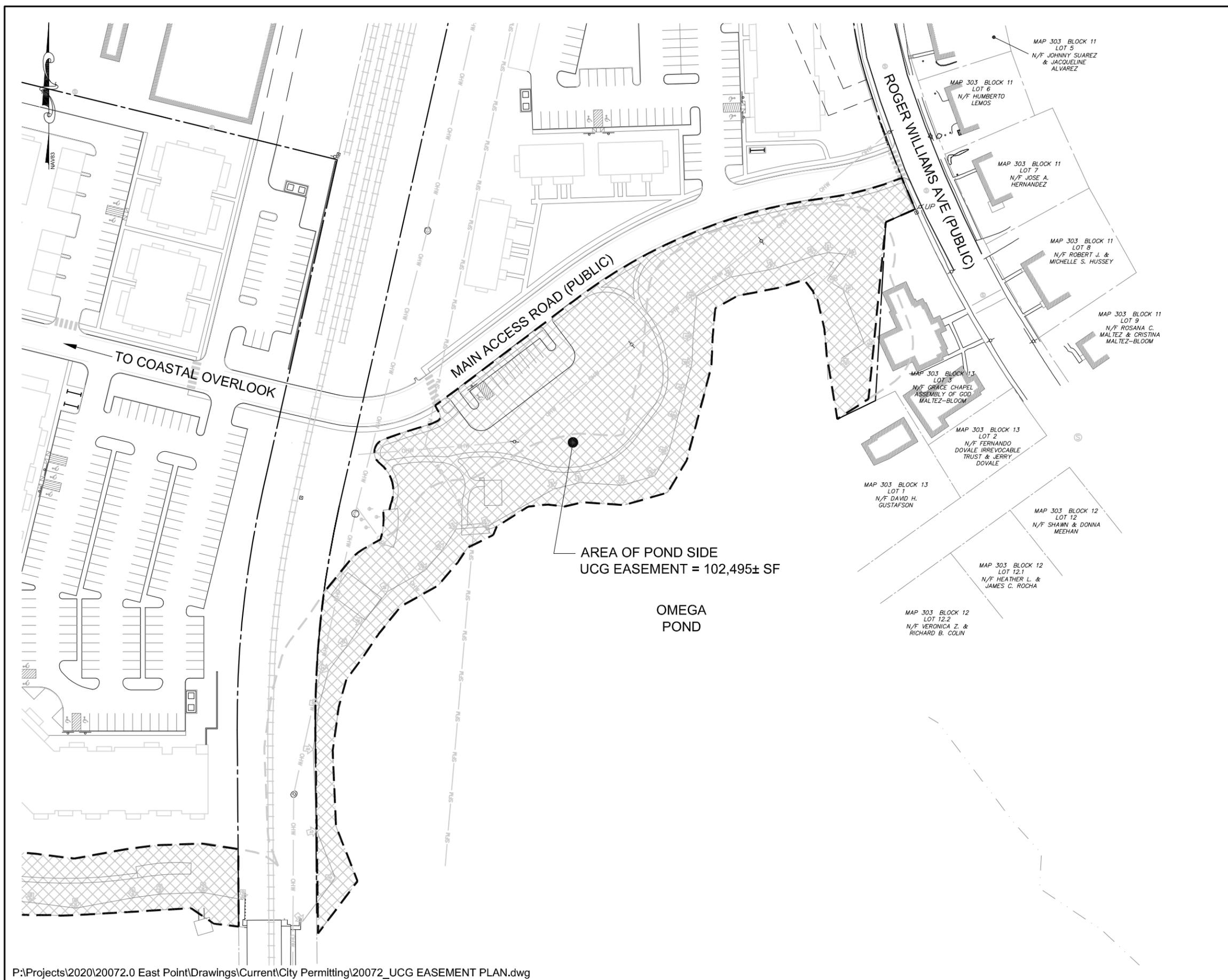
A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842
PHONE (401) 849-0810 FAX (401) 846-4169
WWW.NORTHEASTENGINEERS.COM

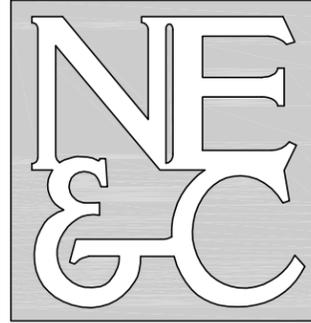
- SITE/CIVIL
- LAND PLANNING
- WATERFRONT
- SURVEYING
- GEOTECHNICAL
- ENVIRONMENTAL
- TRANSPORTATION
- STRUCTURAL



Drawn by:	JJR	Checked by:	GES
Scale:	1"=100'	Date:	22FEB22
"EAST POINT" ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND			
Issued for:			
PERMITTING			
Drawing Title:			
UCG EASEMENT PLAN (COASTAL SIDE)			
Drawing Number:			
UCG-1			
Project Number:			
20072.0			



NORTHEAST ENGINEERS & CONSULTANTS, INC.



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SITE/CIVIL
 LAND PLANNING
 WATERFRONT
 SURVEYING
 GEOTECHNICAL
 ENVIRONMENTAL
 TRANSPORTATION
 STRUCTURAL



Drawn by:	JJR	Checked by:	GES
Scale:	1"=100'	Date:	03JUN21
"EAST POINT" ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND			
Issued for:			
PERMITTING			
Drawing Title:			
UCG EASEMENT PLAN (POND SIDE)			
Drawing Number:			
UCG-2			
Project Number:			
20072.0			



DRAFT

GREENWAY EASEMENT AND RESTRICTIONS

«fname» «mname» «lname» having an address of «organization» «address» «address2» «city» «state» (hereinafter referred to as "Grantor"), hereby grants to the COASTAL RESOURCES MANAGEMENT COUNCIL ("CRMC"), department and agency of the State of Rhode Island and Providence Plantations, created by law (hereinafter referred to as "Beneficiary", and together with the Grantor sometimes hereinafter collectively referred to as the "Parties"); a Greenway Easement and Restrictions in perpetuity in accordance with the provisions hereof, with respect to certain property located in «town» and more particularly described in Exhibit A, attached hereto and incorporated herein (hereinafter referred to as the "Restricted Property").

Whereas, as of _____ the Grantor has received the Beneficiary's approval of Grantor's application to _____ and relating to that certain property (the "Real Property") located in «town», comprised in part of the Restricted Property subject to the Greenway Easement and Restrictions and in part by additional property authorized by CRMC for _____ in accordance with the above-referenced approval (the "Altered Property"), together designated as Tax Assessor's Lot «lots», Plat «plats»; and

Whereas, the Parties agree that the Restricted Property should be maintained in accordance with the approved Greenway landscape plans, as an important natural resource, in its own right, and to provide public access consistent with requirements of the Rhode Island Coastal Resources Management Program Urban Coastal Greenways ("UCG") for the Metro Bay Region in perpetuity; and

Whereas, the parties agree that the intent of maintaining the property in accordance with the Greenway landscape plan is to specifically serve public access and water quality improvement purposes including, but not limited to providing habitat for native plants and wildlife. , and

Whereas, the Parties intend that this document conform and comply with the definitions and purposes set forth in Title 34, Chapter 39; and Title 46, Chapter 23 of the General Laws of the State of Rhode Island, as amended; and

Whereas, it is intended by all the parties that the Beneficiary, its successor(s) and assign(s) shall have the right, in perpetuity, to enforce the restrictions hereinafter set forth against the Grantor, its successor(s) and assign(s) that said restrictions shall run with and bind the Restricted



DRAFT

Property, in perpetuity; and

Whereas, Grantor, its successor(s) and assign(s) shall retain all reasonable responsibilities and shall bear all traditional and reasonable costs and liabilities relating directly to the ownership, operation, upkeep, and maintenance of the Restricted Property, including the maintenance of adequate comprehensive general liability insurance coverage; and

Whereas, Grantor, its successor(s) and assign(s) shall pay, before delinquency, all uncontested taxes, assessments, fees, and charges of whatever description levied on or assessed against the Restricted Property by competent authority, and shall furnish Beneficiary with satisfactory evidence of payment upon reasonable written request; and

Whereas, Grantor, its successor(s) and assign(s) shall hold harmless, indemnify, and defence Beneficiary and its director, officers, employees, agents, contractors and the heirs, personal representatives, successors, and assigns of each of them from and against all liabilities, penalties, costs, losses, damages expenses, causes of action, claims, demands, or judgments, including, without limitation, reasonable attorney's fees, arising directly from injury to or death of any person, or physical damage to any property, resulting from any act or omission of the Grantor, its successor(s), assign(s) and agent(s), or constituting gross negligence or willful misconduct, and relating directly to the Restricted Property, or any condition naturally occurring on the Restricted Property.

NOW, THEREFORE, for and in consideration of the foregoing, and for other good and valuable consideration the receipt and the sufficiency of which is hereby acknowledged by both of the Parties, Grantor does hereby, unconditionally, give, grant, bargain, sell, transfer, assign, and convey unto Beneficiary, forever, a perpetual right and easement for public access and restriction purposes over and on the Restricted Property, in the manner, nature and character and to the extent hereafter expressed, and to that end and for the purpose of accomplishing the intent of the Parties, Grantor, on behalf of itself, its successor(s), and assign(s) does hereby, forever, covenant with Beneficiary to do or refrain from doing upon, or with regard to the Restricted Property, the **various** acts hereinafter set forth, it being hereby agreed and expressed that the doing and the refraining from said various acts, and each of them, on the Restricted Property and the negative easements hereby granted shall be deemed to be covenants running with the Restricted Property and are for the benefit of the beneficiary and all the residents of the State of Rhode Island present and future, to be enforced only by an official representative of the State of Rhode Island, and the Greenway



DRAFT

Easement and Restrictions granted hereby are in gross, and appurtenant to land of all owners of real property abutting the Restricted Property, and shall be deemed to be restrictions pursuant to the provisions of RI General Law Title 34, Chapter 39, (1956), as amended.

The negative easements granted upon the Restricted Property and the acts which Grantor, its successor(s) and assign(s) so covenants to do or refrain from doing upon the Restricted Property or in connection therewith are, and shall be, as follows:

a. There shall be no cutting, trimming or removal of any trees, plants or shrubs, unless specifically approved in accordance with the attached Greenway Landscape Plan,

b. No signs, billboards or other advertising material, of any kind, temporary or permanent, shall be placed, stored or erected upon any portion of the Restricted Property with the exception of CRMC approved interpretative historical or ecological signs and public access signs.

c. Upon completion of a project or phase of a project and its associated Greenway, the following activities are prohibited:

1. Petrochemical Storage;
2. Storage of other hazardous materials;
3. Parking or automobile storage within the Greenway;
4. Application of chemicals (e.g., pesticides, fertilizers, etc.) that have not been approved by the RICRMC;
5. Storage or stockpiling of mulch, compost, or other organic materials;
6. Storage or stockpiling of construction materials;
7. Fueling and servicing of equipment and other motorized vehicles; and
8. Recycling of construction materials.

d. There shall be no intrusion into or above the Greenway of any portion of a building, including, but not limited to decks, patios, overhanging balconies, etc.

e. There shall be no placement of restaurant/cafe tables, even on a temporary basis, within the Greenway.

f. No change in the use and appearance, in any manner, of the Restricted Property shall be caused or permitted,

g. There shall be (on or in the Restricted Property) no dumping or storing of ashes, trash,



DRAFT

rubbish, garbage, sawdust, lawn cuttings, leaves, compost or other material or substances and there shall be no filling, excavating, digging, dredging, mining, quarrying or drilling, removal or disturbance of topsoil, sand, gravel, rock, minerals or other materials or any topographical changes or any building of roads or cause any change in the use and appearance of the Restricted Property in any manner.

h. There shall not be conducted any activity on or in nor any use of the Restricted Property which damages fish or wildlife, or their habitats, or which alters the existing vegetation or drainage patterns, flood plains, or wetlands, or results in erosion, siltation or other forms of pollution.

i. There shall be no construction of any buildings or man-made structures of any kind within the Greenway unless specifically for public access or recreation purposes as approved by the CRMC and consistent with the UCG regulations.

j. Unless specifically approved by this easement at the time of its execution, any Greenway landscape plans approved herein and attached to this easement may not be deleted, modified or otherwise amended; nor shall any such plans be subsequently attached to this easement.

IN WITNESS WHEREOF, the Grantor has set his hand and seal this _____ day of _____, 200 .

Dated:

(Grantor)

STATE OF
COUNTY OF

In _____, on the _____ day of _____, 200 , before me personally, appeared _____, to me known and known by me to be the party executing the foregoing instrument on his own behalf and he acknowledge said instrument, by him executed, to be his free act and deed.

Notary Public: _____

Printed Name: _____

My Commission Expires: _____

ACCEPTANCE:

DRAFT

The Coastal Resources Management Council of the State of Rhode Island, acting by and through _____, its _____, hereunto duly authorized, does hereby accept this grant of Conservation Easement and Restrictions.

For the Coastal Resources Management Council:

Signature Date

Name: _____

Title: _____

UCG Conservation Easement and Restrictions





Urban Coastal Greenway Landscape and Plant Habitat Maintenance and Management Program

Table of Contents

0.0	Preface	1
1.0	Introduction	2
	1.1 General Information	2
	1.2 Site Description	2
	1.3 Urban Coastal Greenway (UCG) Explained	2
	1.4 Required Stormwater Management	3
	1.5 Contacts	3
2.0	Inspection and Monitoring Requirements	4
	2.1 General	4
	2.2 Frequency of Inspections	4
	2.3 Organizing for Inspections	5
	2.4 Inspections	5
3.0	Maintenance Instructions	6
	3.1 General Maintenance Guidelines	6
	3.2 Maintenance Instructions	6

0.0 PREFACE

Name of Site: _____
 Location: _____, East Providence, Rhode Island
 Owner's Name: _____

The intention of this document is to provide guidance to the stewards of the Urban Coastal Greenway on the _____ site during construction and after occupancy. While some specific guidelines will be offered, the majority of the information in this document is intended to educate the persons responsible for the ongoing maintenance of the site as to the goals and intentions of the Rhode Island Department of Environmental Management (RIDEM) and the Coastal Resources Management Council (CRMC). These guidelines focus on the site as a whole with specific attention paid to the variable width Urban Coastal Greenway between the development and the coastal feature adjacent to _____, and the Providence River and the stormwater management facilities (bio-retention) practices. Reference is made to both the December 2010 edition of the Rhode Island Stormwater Design and Installation Standards Manual and CRMC's Urban Coastal Greenway Design Manual for the Metro Bay Region.

*Urban Coastal Greenway Landscape Maintenance and Management
Program*

As required in section 240, Urban Coastal Greenway Management and Maintenance Requirements, the owner of record is responsible for maintaining the UCG in accordance with the operative RICRMC Assent. The owners shall have a direct role in the ongoing maintenance program, consisting of inspection, monitoring and maintenance of the landscape and habitat on the site. Proper maintenance practices and management will help prevent undesirable conditions and emergency situations.

INTRODUCTION

1.1 GENERAL INFORMATION

In accordance with the Urban Coastal Greenway Design Manual for the Metro Bay Region, all landscape plans submitted by Rhode Island property owners for Urban Coastal Greenways shall include a maintenance plan that describes all landscape maintenance and management practices to be performed within the USG. Required practices referenced in this Maintenance and Management Program includes but is not limited to: Pruning and removal of dead material, leaf removal, weeding and removal of invasive species, mulching, irrigation, fertilization and pest management. The majority of the _____ project site was designed to avoid any alterations within the areas designated as UCG so that other than selective invasive management, there are no landscape activities proposed in these areas.

1.2 SITE DESCRIPTION

Located _____ in East Providence, Rhode Island, _____ is a proposed residential development consisting of approximately 48 acres. The site exists today with low brush, scattered trees and maintained open fields with several drainage ponds. Up until the 1980's, the site was used as an oil storage and distribution site and was completely altered through removal of vegetation and grading activities.

1.3 URBAN COASTAL GREENWAY (UCG) EXPLAINED

The project site is positioned on the eastern bank of the Providence River and is entirely within the jurisdiction of the Rhode Island Coastal Resources Management Agency. As dictated in the Metro Bay Region SAMP an Urban Coastal Greenway (UCG) is required. Section 150.3, General Standards for Urban Coastal Greenways, (b) states that “applicants may utilize an averaging method, where compensatory UCG width is provided for a necessary reduction in UCG width in other areas of the site, provided the total square footage of the UCG remains the same. “ On the _____ site an average UCG width was determined and is a minimum of 50’ wide. As such, the areas designated as UCG, as shown on the accompanying exhibits, are variable in width and were developed to best accommodate the existing conditions and use smart growth techniques to minimize disturbance to the site and maximize opportunities for development.

The UCG must be properly maintained and managed to protect the environment and prevent disturbances from man-made interactions and coastal flooding hazards. The UCG acts as a natural buffer between the coastline and the proposed residential development at _____.



In addition to the existing and proposed vegetation, within the proposed design there are pathways through the USG that allow public access including a “Primary Access path” which runs parallel to the shoreline and various “Secondary Paths” connecting the public spaces to the primary access path. In addition there are several paths which provide access through the UCG to the coastline.

It is the purpose of this manual that the UCG shall be preserved to sustain any existing and additional planting, habitats and landscape within the Urban Coastal Greenway

1.4 REQUIRED STORMWATER MANAGEMENT

According to the Rhode Island Stormwater Design and Installations Manual and the Urban Coastal Greenway Design Manual for the Metro Bay Region, all stormwater within the UCG must be controlled on site. A series of Bioretention areas, Wet Vegetated Treatment Systems, and Box Filters are utilized throughout the site for stormwater management and treatment.

1.5 CONTACTS

Noble Development, LLC, Owner
10 Greene St, Providence, RI 02903
www.churchillandbanks.com

Coastal Resources Management Council (CRMC)
www.crmc.ri.gov
Stedman Government Center – Suite 3
4808 Tower Hill Road
Wakefield, RI 02879-1900
(401)783-3370

Rhode Island Department of Environmental Management (RIDEM)
www.dem.ri.gov
235 Promenade Street
Providence, RI 02908-5767
(401)222-6800

Northeast Engineers & Consultants, Inc.
6 Valley Road
Middletown, RI 02842
www.northeastengineers.com
Tel: (401) 849-0810

Kevin Alverson
Kevin M. Alverson Landscape Architecture
360 Annaquatucket Road
Wickford, RI 02852
Tel: (401) 338-0044







2.0 INSPECTION AND MONITORING REQUIREMENTS

2.1 GENERAL

In addition to maintaining the new plantings in the UCG, it is the owner's responsibility to maintain the primary and secondary paths. The path surfaces and public access amenities such as benches, trash receptacles and signage must be regularly inspected and maintained. Litter must be periodically cleaned up and access to the waterfront, provided by the paths, must be maintained. Signage, fencing, plantings or other methods of discouraging public access are not allowed.

The public paths will include bituminous and concrete sidewalks, gravel paths and woodchip paths. These paths must be maintained by repairing any broken or eroded surfaces and cutting back vegetation to prevent encroachment. This manual sets forth a monitoring and inspection program which must be adhered to and includes the following;

Continuous Inspections: Physical inspections must be periodically conducted to ensure the integrity of the UCG elements. Visual observations should be noted and if action is required, then forwarded to the appropriate professional. Specific observations should be made of the stormwater systems including bioretention facilities, access paths, and vegetation within the planting areas.

Conditional Inspections: Immediately after the occurrence of an event affecting the landscape such as heavy rains, storm tides, or vandalism, an inspection must be performed. The owner shall keep records of all inspections including the time, date, and location of the inspection. Additional information should be recorded including the weather on the date of inspection, any storm events directly preceding the inspection, the conditions observed and recommendations for action.

2.2 FREQUENCY OF INSPECTIONS

Continuous Inspections: The personnel responsible for the general maintenance of the site should observe the site conditions on a regular basis. At a minimum a thorough inspection of the UCG should be performed every six months. Inspections shall be kept on a continuous calendar with existing conditions and action taken recorded. Appropriate professionals shall be identified and engaged when necessary.

Conditional inspections: Immediately after the occurrence of events such as unusually high tides, heavy rain events, vandalism and other significant events, a thorough inspection shall be done for the site. Dependent on the severity of impacts, an appropriate professional shall be consulted to assist with inspection.

Essential Inspection Times: During the following occurrences, an inspection is recommended regardless of other schedules.

- During the six months immediately after construction, bio-retention facilities shall be inspected following at least the first two precipitation events of at least .5 inch to ensure that the system is functioning properly.
- Prior to predicted major rainstorm or heavy snow melt.
- During or after a severe rainstorm, especially after storm events of greater than or equal to the one-year, 24 hour type III precipitation event.
- During or following a severe windstorm; check performance during the storm and after the storm has subsided.
- Following a significant high tide or coastal flooding, the site and its appurtenant structures should be inspected.

2.3 ORGANIZING FOR INSPECTIONS

A list of appropriate personnel with the qualifications to assess and make recommendations shall be made available to the person in charge. The person in charge shall also be identified and should be a qualified employee that is familiar with the site and its typical conditions. An inspection checklist shall be developed to ensure thorough observations and recording of information. Inspectors should observe methodically, using appropriate equipment, record accurate observations, and survey the landscape, stormwater structures and site amenities in detail.

Recording Inspections and Observations: To ensure significant site condition information, an accurate and detailed description shall be recorded for each inspection. Pictures and measurements should be taken to allow for a more complete report of site condition observations for potential problems. The following shall be included in observational recordings:

Date, Time, Weather and Names and Titles of personnel monitoring shall always be noted for record-keeping purposes.

Location of any site condition issues must be accurately noted for further evaluation. Photographs may assist in the recording of a location, along with a detailed description of where the photo was taken.

Extent of area shall be recorded with details of length, width, depth or height of any suspected problems.

2.4 INSPECTIONS

The _____ site has the following features which must be inspected:

Bio-retention Areas including Sediment Forebays, Outlet Structures, RipRap and Vegetation

Gravel Wet Vegetated Treatment Systems (GWVTS)#1 only

Planted Areas adjacent to _____

Public Access paths, including the Primary and Secondary Access paths which are concrete, bituminous and woodchip surfaces





3. MAINTENANCE INSTRUCTIONS

3.1 GENERAL MAINTENANCE GUIDELINES

As described in the Urban Coastal Greenway Design Manual for the Metro Bay Region, the UCG Program was designed to achieve three primary goals: increased public access to the coast, complete on-site stormwater management primarily through vegetative treatments, and the preservation and restoration of the aesthetic value of Rhode Island's urban shoreline through sustainable landscaping. The _____ project was designed to achieve these goals and the maintenance guidelines are specifically to insure that these goals are maintained as the site matures.

3.2 MAINTENANCE INSTRUCTIONS (See Exhibit 'E')

Buffer Vegetation – As shown on the attached plans, particularly Exhibits A & B, there are several areas along the northerly perimeter of the site which were altered to accommodate grading necessary to meet the engineering requirements of the site design. As required in Section 210 D of the Urban Coastal Greenway Design Manual, these plantings should be maintained as follows:

- Pruning and weeding

Whenever possible use mechanical methods of vegetation removal (e.g., mowing with tractor-type or push mowers, hand cutting with gas or electric powered weed trimmers) rather than applying herbicides. Use hand weeding where practical. Avoid loosening the soil when conducting mechanical or manual weed control, as this could lead to erosion. Use mulch or other erosion control measures when soils are exposed.

- Waste management

Place temporarily stockpiled material away from watercourses, and berm or cover stockpiles to prevent material releases to storm drains. Leaves, sticks, or other collected vegetation should be disposed of by appropriate means as leaf and yard waste. Do not dispose of collected vegetation into waterways or storm drainage systems.

- Fertilizer

Fertilizer is not to be used within the UCG. On the portions of the property which are outside the UCG, it is important to minimize the use of high nitrogen fertilizers that produce excess growth requiring more frequent mowing or trimming. Application techniques should insure that the proper application rates are followed and that no fertilizer is applied to the pavement where it will wash into the surrounding landscape.

- Irrigation

Irrigation is necessary after the planting during plant establishment only. Utilize practices and equipment that promote water conservation, such as soaker hoses and moisture sensors. In addition, plants have been selected which are hardy and adaptable and once established should need no further irrigation or fertilization.

Stormwater Treatment Facilities: (For additional guidelines see Operations & Maintenance Plan, dated _____ by Northeast Engineering.)

- Bioretention Facility (*See Exhibit 'B'*)

Inspections are an integral part of system maintenance. During the six months immediately after construction, bioretention facilities should be inspected at least twice or more following precipitation events of at least 1.0 inch to ensure that the system is functioning properly. Thereafter, inspections should be conducted on an annual basis and after storm events of greater than or equal the 1-year, 24-hour Type III precipitation event.

Minor soil erosion gullies should be repaired when they occur. Pruning or replacement of woody vegetation should occur when dead or dying vegetation is observed. Separation of herbaceous vegetation rootstock should occur when over-crowding is observed, or approximately once every 3 years. The mulch layer should also be replenished (to the original design depth) every other year, as directed by inspection reports. The previous mulch layer should be removed, and properly disposed of off-site. If at least 50 percent vegetation coverage is not established after two years, a reinforcement planting should be performed. If the surface of the bioretention system becomes clogged to the point that standing water is observed on the surface 48 hours after precipitation events, the surface should be rototilled or cultivated to breakup any hard-packed sediment and then re-vegetated. Vegetation along the maintenance access roads should be mowed annually.

- Gravel Wet Vegetated Treatment Systems (GWVTS) #1 only – (*See Exhibit 'A'*)

General inspections should be conducted on an annual basis and after storm events greater than or equal to the 1-year, 24-hour Type III precipitation event. Areas with a permanent pool should be inspected on a semi-annual basis. The maintenance Rhode Island Stormwater Design and Installation Standards Manual December 2010 objectives for these practices include preserving the hydraulic and removal efficiency of the basin or GWVTS and maintaining the structural integrity.

The slopes of the basin or GWVTS should be inspected for erosion and gullying.

Reinforce existing riprap if riprap is found to be deficient, erosion is present at the outfalls of any control structures, or the existing riprap has been compromised.



All structural components, which include, but are not limited to, trash racks, access gates, valves, pipes, weir walls, orifice structures, and spillway structures, should be inspected and any deficiencies should be reported. This includes a visual inspection of all stormwater control structures for damage and/or accumulation of sediment. Sediment should be removed from the forebay when design depth has been reduced by 50%. All material, including any trash and/or debris from all areas within the extents of the basin or GWVTS area including trash rack and flow control structures, should be disposed of in accordance with all federal and local regulations.

Any areas within the extents of the stormwater facility that are subject to erosion or gulying should be replenished with the original design material and re-vegetated according to design drawings. Slope protection material should be placed in areas prone to erosion. Embankment stability should be inspected for seepage and burrowing animals.

Mow the grass around the perimeter of the basin or GWVTS at least 4 times annually. Vegetation along the maintenance access roads should be mowed annually. Prune all dead or dying vegetation within the extents of the basin or GWVTS, remove all herbaceous vegetation root stock when overcrowding the maintenance access to the facility, remove any vegetation that has a negative impact on stormwater flowage through the facility, and trim any overgrown vegetation within the basin. Any invasive vegetation encroaching upon the perimeter of the facility should be pruned or removed if it is prohibiting access to the facility, compromising sight visibility and/or compromising original design vegetation. Replace any/all original vegetation that has died off or has not fully established, as determined at the time of the inspection. GWVTS vegetation should be reinforced to its original design standards if less than 50% of the original vegetation is established after two years.

Public Access Paths: (See Exhibit 'C')

- Concrete & Bituminous

General inspections should be conducted to observe normal wear. Care should be taken to use products suitable for concrete when applying ice melt to prevent spalling. Tree roots should be prevented from growing under the walkway and creating trip hazards. Settling, cracking or upheaval can also cause trip hazards and should be repaired as soon as they are observed.

- Wood Chip

General inspections should be conducted to observe normal wear and encroachment from adjacent vegetation. Ground covers, shrubs and low tree branches should be cut back to prevent encroachment on the path and allow for easy and safe passage. Erosion, roots and settlement are all hazards to pedestrians and should be remedied as soon as they are observed.



- Gravel

Uneven settling, gullies, or erosion related damage shall be repaired by filling the damaged area with similar gravel and compacting it to create level grade. Tree roots and encroaching vegetation shall be removed to allow safe passage.

- Stone Dust

Uneven settling, gullies, or erosion related damage shall be repaired by filling the damaged area with similar materials and compacting it to create level grade. Tree roots and encroaching vegetation shall be removed to allow safe passage.





APPENDIX K CRMC VARIANCE CRITERIA MEMORANDUM





**NORTHEAST ENGINEERS
& CONSULTANTS, INC.**

"A Knowledge Corporation"®
6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 401.849.0810 PHONE 401.846.4169 FAX

Memorandum



Date: February 18, 2022
To: Coastal Resources Management Council
From: Jeremy Rosa, PE
Subject: East Point, Variance Criteria

Construction is proposed in two areas of the East Point Development within the required construction setback. These areas include:

1. A portion of the public access overlook parking located at the northwest corner of the Coastal Side of the development.
2. A portion of the proposed public road from Roger Williams Avenue and areas of pedestrian public access on the Pond Side of the development.

The six (6) criteria listed in Section 1.1.7 of the CRMP (650-RICR-20.00.1) are addressed below.

1. The proposed alteration conforms with applicable goals and policies of the Coastal Resources Management Program.

Section 5.5.1.A.3.d of the Metro Bay Region Special Area Management Plan indicates that purpose of the construction setback is "provide for fire, safety, and maintenance purposes." None of the proposed encroachments into the construction setback described in the section above will negatively impact these purposes. Given that all of the proposed encroachments are related to either vehicle or pedestrian access, it is reasonable to assume that they will be used for "fire, safety, and maintenance purposes".

2. The proposed alteration will not result in significant adverse environmental impacts or use conflicts, including but not limited to, taking into account cumulative impacts.

The areas of the proposed encroachments into the construction setback are areas in which either disturbance is currently present, or areas which are already environmentally impacted.

- a. The area of the Pond Side public access road encroachment into the construction setback is defined by the existing entrance to the site. This entrance location provides good sightlines in both directions along Roger Williams Avenue, approximately follows the existing paved access through the site, and leads to the existing railroad crossing which could not be modified.
- b. The area of pedestrian public access within the construction setback on the Pond Side has been located adjacent to ELUR area "C". This area of the site is already disturbed. This access will facilitate any future observations of this ELUR area which may be required in the future.

- c. The area of vehicle and pedestrian access within the construction setback on the Coastal Side has been located in the vicinity of ELUR area "A". The proposed pavement and additional fill is intended to enhance the existing soil cap in this region.

It should be noted that Section 5.5.1.A.3.d also indicates that a construction setback may be reduced when the applicant can clearly demonstrate that "the project and its subsequent used and maintenance will not result in the privatization of, or preclude public use of, the UCG". Given that all of the proposed encroachments are directly related to enhancing the public's access, either to the site, or to the UCG, it is the opinion of NE&C that the quoted statement above has demonstrated satisfactorily.

3. Due to conditions at the site in question, the applicable standard(s) cannot be met.

It is the opinion of NE&C that the proposed encroachments are related to existing and functional site access points, or to existing environmental conditions that cannot be removed. Revising the site design to meet the construction setbacks in these areas offers no substantial benefit.

4. The modification requested by the applicant is the minimum variance to the applicable standard(s) necessary to allow a reasonable alteration or use of the site.

There are no other existing site access points or other areas with environmental restrictions within the construction setback which may be beneficial to maintain. The proposed variance is therefore the minimum variance. It is reasonable to assume that any proposed use, or alterations of the site, would take the existing access and ELUR areas into consideration.

5. The requested variance to the applicable standards(s) is not due to any prior applicant or the applicant's predecessors in title.

Portions of the encroachments into the construction setback are the result of the ELUR area locations. While the applicant's predecessors in title coordinated these locations, these locations were also approved by representatives from the state, either RIDEM or CRMC. RIDEM has since indicated that they do not want these areas relocated.

Based on aerial photography, the existing entrance from Roger Williams Avenue has been present for at least thirty-five years. It is unlikely that a proposal for an UCG with an associated construction setback could have been predicted when the entrance was installed.

6. Due to the conditions of the site in question, the standard(s) will cause the applicant an undue hardship. In order to receive relief from an undue hardship, an applicant must demonstrate inter alia the nature of the hardship and that the hardship is shown to be unique or particular to the site. Mere economic diminution, economic advantage, or inconvenience does not constitute a showing of undue hardship that will support the granting of a variance.

It is the opinion of NE&C that the locations of the existing ELUR areas represent a hardship with respect to maintaining a construction setback in these regions. These areas must be maintained in accordance with the established environmental restrictions. Utilizing them as proposed both enhances public access, enhances maintenance access, and in the case of ELUR area "A", will provide a more substantial cap over buried material.

It is also the opinion of NE&C that relocating the existing entrance from Roger Williams Avenue such that it is located outside the construction setback represents a hardship as it is located at the point

along the frontage which provides the best sight lines in both directions along this public roadway. Given that this entrance is to serve as a primary access point for potentially hundreds of residential units, it seems critical that public safety be a paramount concern.





APPENDIX L BARGE REMOVAL MEMORANDUM





**NORTHEAST ENGINEERS
& CONSULTANTS, INC.**

"A Knowledge Corporation"®
6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 401.849.0810 PHONE 401.846.4169 FAX

Memorandum



Date: January 24, 2022
To: Coastal Resources Management Council
From: Jeremy Rosa, PE
Subject: East Point, Barge Removal Sequence

General:

1. Do not begin work until all local, state, and federal permits have been secured.
2. A pre-construction survey of the area surrounding the debris shall be required.
3. All construction vehicles shall enter and exit the site via a designated construction entrance.
4. Coordinate with biologist to avoid collisions and contact with all wildlife. Contractor shall report sightings to stranded marine life, distressed or dead birds and mammals to the appropriate State or Federal agency.
5. All removal operations should take place during daylight hours.
6. Avoid all bird and wildlife nesting or aggregation areas or marine mammal haul-out locations.
7. Ensure no nesting birds are adjacent or habituating the debris, in the footprint of vehicle traffic, or in the path of debris to be removed.
8. To limit disturbance to wildlife and intertidal-associated species, work crews should be limited in size and number to minimize number of personnel and equipment required to complete the removal in an efficient time frame. Equipment and personnel should work as closely together as is feasible during removal operations to minimize disturbance, rather than spread across the entire area.
9. Avoid all necessary contact with coastal vegetation or soils on foot or by vehicle in transit to and from debris removal site.
10. Minimize unnecessary disturbance or removal of natural sediment, organic matter, and vegetation not required to access man-made debris items. If moving organic debris is required, replace or deposit in the nearest tidally influenced area.
11. Staging areas for temporary storage of recovered debris shall be designated upland of the coastal feature and on stabilized earth.
12. Following debris removal, but prior to removal of equipment, a post construction survey shall be completed.
13. Contractor to ensure the removal of all equipment and materials deployed to facilitate debris removal operations at conclusion of operations.

Erosion and Sediment Control:

1. Contractor shall install turbidity curtains around the barge to be removed. Curtains type selected shall be suitable for tidal waters.
2. Curtains shall be installed sufficiently far from the area of work such that they will not be potentially impacted by the removal of debris.
3. Turbidity curtains shall not extend to touch the bottom of the waterway. A minimum 1-foot gap should exist between the weighted lower end of the skirt and the bottom at mean low water.

4. Barriers should be a bright color, yellow or orange is recommended).
5. Curtain fabric shall have a minimum thickness of 45 mil, a weight of 18 oz. /sq. yd., a grab tensile strength of 300 lbs., with a UV inhibitor.
6. Seams in the fabric shall be either vulcanized welded or sewn, and shall develop the full strength of the fabric.
7. Floatation devices shall be flexible, buoyant units contained in an individual floatation sleeve or collar attached to the curtain. Buoyance provided by the floatation units shall be sufficient to support the weight of the curtain and maintain a freeboard of at least 3 inches above the water surface level.
8. Load lines must be fabricated into the top and bottom of all floating turbidity curtains. The load lines shall consist of a chain incorporated into the bottom hem of the curtain of sufficient weight to serve as ballast to hold the curtain in a vertical position. Additional anchors shall be provided as necessary. The load lines shall have suitable connecting devices which develop the full breaking strength for connecting to load lines in adjacent sections.
9. External anchors may consist of wooden or metal stakes (2x4 inch or 2.5-inch diameter wood or 1.33 lbs./linear foot steel).
10. Bottom anchors must be sufficient to hold the curtain in the same position relative to the bottom of the watercourse without interfering with the action of the curtain. The anchor may dig into the bottom or may be weighted, and should be attached to a floating anchor buoy via an anchor line. Contractor to follow manufacturer recommendation for anchor spacing.
11. Curtains shall be inspected on a weekly basis and repaired as necessary. Improperly installed curtains shall be corrected.
12. Should repairs to the geotextile fabric become necessary, the contractor shall follow the manufacturer instructions to ensure adequacy of the repair.
13. Material trapped by turbidity curtains shall be allowed to settle for a minimum of 6-12 hours prior to the final removal of curtain.
14. When removing curtains, care should be taken to protect the skirt from damage as the curtain is dragged from the water. The area selected to bring the curtain to shore should be free of sharp rocks, broken cement, debris, etc. so as to minimize damage when hauling the curtain across the area.

Debris Removal Operations:

1. Both manual and equipment assisted lifting or dragging methods may be used to remove the barge.
2. Should the contractor elect to dismantle the barge using personnel and equipment located on the vessel, manual recovery is preferred if the substrate is firm enough to support foot traffic.
3. Should manual recovery of barge debris not be possible, wheeled or tracked vehicles may be used to recover debris items via lifting or dragging. In general, lifting techniques are preferred to dragging techniques in order to minimize the impact of removal.
4. While removing debris items via dragging, towlines should be attached to the debris at the closest/least intrusive point. The debris may be carefully pulled out of the shoreline to upland areas via wheeled or tracked vehicle.
5. When operating wheeled or tracked vehicles and equipment, the equipment should be staged as far from the coastal feature as reasonably feasible for safe usage.
6. If temporary excavation of sediments is required to access or remove debris, the excavated areas should be returned to its original contour and topography.
7. Any land-based dismantling of large pieces of debris shall be completed with perimeter boundaries to ensure that no debris material is returned to the waters of the state.
8. Should land-based removal of the barge prove to be problematic, the contractor may elect to remove some or all of the debris via boom mounted grapple on a shallow draft barge or other suitable craft.
9. All barge debris shall be removed to an off-site licensed disposal facility.



APPENDIX M OLRSM letters of Compliance





RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-22-4462

INTERIM LETTER OF COMPLIANCE
CASE NO. 96-014

May 22, 2006

George K. C. Lee,
Chairman & Chief Executive Officer
GeoNova Development Company, LLC
c/o Greenberg Traurig, LLP
200 Park Avenue, 14th Floor
New York, NY 10166

RE: Ocean State Steel Property, 300 Bourne Avenue, East Providence, Rhode Island

Dear Mr. Lee:

In the matter of the above referenced site, the Rhode Island Department of Environmental Management's (the Department's) Office of Waste Management (OWM) has to date received the following documents submitted on behalf of GeoNova Development Company (GeoNova) and Solucorp Industries Limited (Solucorp):

1. Site Investigation Report, Ocean State Steel Property, 310 Bourne Avenue, East Providence, Rhode Island (SIR), prepared by BATG Environmental of CT, L.L.C. (BATG), dated March 2003, received March 12, 2003;
2. Letter to the Department from Richard A. Sherman, Esquire, of Edwards & Angell, LLP (E&A), Re: GeoNova Development Company, LLC, Ocean State Steel Property, 300 Bourne Avenue, East Providence, Rhode Island, Case No. 96-014, RIEDC Certificate of Critical Economic Concern issued April 30, 2003 (copy enclosed), dated May 16, 2003;
3. Site Investigation Report Addendum 1, Ocean State Steel Property, 310 Bourne Avenue, East Providence, Rhode Island (SIR Addendum 1), prepared by BATG, dated October 24, 2003;
4. Site Investigation Report Addendum 2, Ocean State Steel Property, 310 Bourne Avenue, East Providence, Rhode Island (SIR Addendum 2), prepared by BATG, dated December 10, 2003;
5. Letter to the Department from BATG, Re: Ocean State Steel Property, 300 Bourne Avenue, East Providence, RI, Site Investigation Report Comments Response, Case No. 96-014, dated December 10, 2003;

Former Ocean State Steel
300 Bourne Avenue, East Providence, RI
Interim Letter of Compliance



May 22, 2006
Case No. 96-014
Page 1 of 4



30% post-consumer fiber

6. Letter to the Department from BATG, Re: Former Ocean State Steel Property, 300 Bourne Avenue, East Providence, Rhode Island, Responses to 2/13/04 DEH Comments on Site Investigation Report Addendum 2, Case No. 96-014, dated February 25, 2004;
7. Letter to the Department from Richard A. Sherman, Esquire, E&A, Re: Geo Nova Development Company, LLC, Former Ocean State Steel Property, East Providence, Rhode Island, C.A. No. 96-014, dated March 3, 2004, documenting that the Public Notice requirements were completed, including copies of the Notification to Abutters, dated February 25, 2004, and the Affidavit of Publication in the Providence Journal, dated March 1, 2004;
8. Letter to the Department from Richard A. Sherman, Esquire, E&A, Re: Geo Nova Development Company, LLC, Former Ocean State Steel Property, East Providence, Rhode Island, C.A. No. 96-014, dated March 30, 2004, documenting that the Supplementary Public Notice requirements were completed;
9. Remedial Action Work Plan, Ocean State Steel Property, 310 Bourne Avenue, East Providence, Rhode Island (RAWP), prepared by BATG, dated April 8, 2004;
10. Completion Report for the Allis-Chalmers Transformer and PCB Impacted Soil and Concrete, (Former Ocean State Steel Property, in the City of East Providence, Rhode Island), prepared by BATG, dated February 2005, received March 4, 2005 (the PCB Report);
11. Remedial Action Closure Report, Former Ocean State Steel Property, 310 Bourne Avenue, East Providence, Rhode Island, Case No. 96-014 (consisting of 8 volumes), prepared by Red Technologies, LLC (RED), dated March 31, 2005 (the Closure Report);
12. Sediment Sampling of Omega Pond and the Seekonk River, Former Ocean State Steel Site, 300 Bourne Ave., East Providence, RI, Case No. 96-014, prepared by RED, dated April 4, 2005 (the Sediment Report);
13. Topographic Survey Plan, Map 203 - Block 1 - Lot 4, Map 303 - Block 13 - Lots 4 & 5, Roger Williams Ave & Bourne Ave. - East Providence, RI, (consisting of 5 - 24" x 36" sheets), prepared by Waterman Engineering Co. (WEC), dated March 13, 2003, submitted on June 17, 2005;
14. Addendum Number 1 to Remedial Action Closure Report, Former Ocean State Steel Property, 310 Bourne Avenue, East Providence, Rhode Island, Case No. 96-014, prepared by RED, dated July 22, 2005 (Addendum 1);
15. Correspondence from Phyllis Shiller, Phoenix Environmental Laboratory Director, Re: Ocean State Steel, dated December 8, 2005, received via e-mail December 13, 2005;
16. Addendum Number 2 to Remedial Action Closure Report, Former Ocean State Steel Property, 310 Bourne Avenue, East Providence, Rhode Island, Case No. 96-014, prepared by RED, dated January 2006, received January 11, 2006 (Addendum 2);

Former Ocean State Steel
300 Bourne Avenue, East Providence, RI
Interim Letter of Compliance



May 22, 2006
Case No. 96-014
Page 2 of 4

- 17. Letter to the Department from Richard A. Sherman, Esquire, E&A, Re: Case No. Nova Development Company LLC, Closure Report Comments 3 Letter dated April 13, 2006, Case No. 96-014, dated April 25, 2006;
- 18. Ocean State Steel Property, 300 Bourne Avenue, East Providence, RI, Addendum Number 3 to Remedial Action Closure Report, Case No. 96-014, prepared by RED, dated April 27, 2006, (Addendum 3); and
- 19. Letter to the Department from Richard A. Sherman, Esquire, E&A, Re: Former Ocean State Steel Property, 300 Bourne Avenue, East Providence, Rhode Island, Case No. 96-014, dated May 18, 2006, received May 19, 2006, including copies of the recorded Environmental Land Usage Restriction (ELUR), and letter from National Grid regarding compliance with the ELUR concerning ELUR area C.

Based upon the information contained in these submittals the Department has concluded that the above referenced property is in compliance with the Remediation Regulations at this time

Be advised that the Department reserves the right to require additional actions under the aforementioned Remediation Regulations at the subject property should any of the following occur:

- A. Conditions at the site, previously unknown to the Department are discovered;
- B. Information, previously unknown to the Department becomes available;
- C. Policy and/or regulatory requirements change;
- D. Groundwater monitoring at the site is discontinued without specific Department approval; or
- E. Any of the aforementioned parties or any future holder (s) of any interest in the property fails to adhere to the terms and conditions of the ELUR and/or the SMP for the Prt party.

In addition, the Department anticipates promptly executing the Release and Termination of Consent Agreement and Conservation Restriction, regarding the Consent Agreement (R.I.R.A CA-92-60) dated August 4, 1992 by and between the Department and Ocean State Steel, Inc. and related Conservation Restriction, dated May 29, 1992 executed by Ocean State Steel, Inc. and recorded in the City of East Providence Records of Land Evidence on October 19, 1992 at 2:57 P.M. An original of the Release and Termination will be sent to you by mail upon execution.

Nothing in this Interim Letter of Compliance relieves the responsible party or the site from compliance with all other applicable State or Federal regulations.

If you have any questions regarding this letter or wish to arrange another meeting, please contact me by telephone at (401) 222-2797 x7109 or by e-mail at joseph.martella@dem.ri.gov.

Former Ocean State Steel
300 Bourne Avenue, East Providence, RI
Interim Letter of Compliance



May 22, 2006
Case No. 96-014
Page 3 of 4



APPENDIX N PROPOSED AMENITIES MEMORANDUM





**NORTHEAST ENGINEERS
& CONSULTANTS, INC.**

"A Knowledge Corporation"®
6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 401.849.0810 PHONE 401.846.4169 FAX

Memorandum



Date: January 24, 2022

To: Coastal Resources Management Council

From: Jeremy Rosa, PE

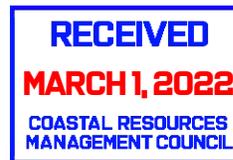
Subject: East Point, Compensation for Reduced Greenway Width (100' to 50')

The following list of amenities and features is intended to document the proposed compensation for the reduced urban coastal greenway (UCG) width (reduction from 100-feet wide to 50-feet wide).

- Five (5) Primary Accessible Pervious Paver Promenade Overlook Areas
- Three (3) Secondary Accessible Overlook Areas
- Multiple Resilient Granite Benches Set at Regular intervals along the entirety of the UCG
- Accessible Canoe/Kayak Launch
- Up to five (5) Interpretive Signage Panels providing educational content for UCG users
- Future Focal Point Sculpture Locations (up to five (5) sculpture locations have been identified)
- A centralized open park space at the project interior with Accessible Access Walkways to the UCG and River Overlook, including new patio, seating, and open passive recreational multi-use lawn area.
- New Sculptural Bike Racks at Public Access Parking Areas



APPENDIX O RIHPHC LETTER OF NO OBJECTION





STATE OF RHODE ISLAND

HISTORICAL PRESERVATION & HERITAGE COMMISSION

Old State House 150 Benefit Street Providence, RI 02903

Telephone 401-222-2678
TTY 401-222-3700

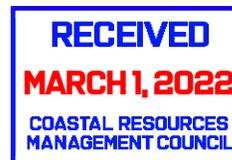
Fax 401-222-2968
www.preservation.ri.gov

3 September 2021

Via email: ltturner@crmc.ri.gov & jabbruzzese@crmc.ri.gov

Jennifer R. Cervenka, Chair
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road
Wakefield, Rhode Island 02879

Re: CRMC File Number 2021-06-074
Applicant: W. Mark Russo Esq.
East Point Development
Bourne Avenue
East Providence, Rhode Island



Dear Ms. Cervenka:

The Rhode Island Historical Preservation and Heritage Commission (RIHPHC) staff has reviewed the additional information that the applicant provided for the above-referenced project. W. Mark Russo Esq. is proposing to develop three vacant properties at 300 Bourne Avenue in East Providence.

As stated in our July 28, 2021 letter, the vacant properties are located within the Phillipsdale Historic District and abut the former Richmond Paper Company Mill Complex, 310 Bourne Avenue, both of which are listed in the National Register of Historic Places. In that letter, we requested renderings and elevation drawings of the new buildings, which were received on August 6th. Based upon the information provided, the RIHPHC has no objection to the CRMC issuing the requested permit. However, we recommend that the north end of the western parcel be reconfigured, and the buildings redesigned, to act as a transition between the industrial buildings to the north and the planned suburban subdivision to the south. This could be achieved by incorporating more industrial architectural features and resituating the larger buildings to be at the north end of that parcel.

These comments are provided in accordance with *650-RICR-20-00-1.2.3 Areas of Historic and Archaeological Significance* of the Coastal Resources Management Council. If you have any questions, please contact Elizabeth Totten, Project Review Coordinator, of this office.

Sincerely,

Jeffrey Emidy
Interim Executive Director/Interim State Historic Preservation Officer

CC via email: W. Mark Russo Esq.
mrusso@frlawri.com



APPENDIX P CANOE/KAYAK LAUNCH INSIGNIFICANT ALTERATION PERMIT





RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF WATER RESOURCES
235 Promenade Street, Providence, Rhode Island 02908



November 9, 2018

Ferrucci Russo, P.C.
55 Pine Street, 4th Floor
Providence, RI 02903

Insignificant Alteration – Permit

RE: Application No. 18-0112 in reference to the property and proposed project located:

Approximately 560 feet west of Reservoir Avenue, approximately 520 feet south of the intersection of Reservoir Avenue and Bourne Avenue, Assessor's Plat 303, Lots 4 & 5, Block 13, UP 32-2, East Providence, RI.

Dear Mr. Russo:

Kindly be advised that the Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has completed its review of your **Request for Preliminary Determination** application. This review included a site inspection of the above referenced property ("subject property") and an evaluation of the proposed bike path, dock and boat launch, with associated grading and rip rap swale as illustrated and detailed on site plans submitted with your application. These site plans were received by the DEM on September 21, 2018.

Our observations of the subject property, review of the site plans and evaluation of the proposed project reveals that alterations of freshwater wetlands are proposed. However, pursuant to Rule 9.00 of the Rules and Regulations Governing the Administration and Enforcement of the Fresh Water Wetlands Act (Rules), this project may be permitted as an **insignificant alteration** to freshwater wetlands under the following terms and conditions:

Terms and Conditions for Application No. 18-0112:

1. This letter is the DEM's permit for this project under the R.I. Fresh Water Wetlands Act, Rhode Island General Laws (RIGL) Section 2-1-18 et seq.
2. This permit is specifically limited to the project, site alterations and limits of disturbance as detailed on the site plans submitted with your application and received by the DEM on September 21, 2018. A copy of the site plans stamped approved by the DEM is enclosed. Changes or revisions to the project that would alter freshwater wetlands are not authorized without a permit from the DEM.
3. Where the terms and conditions of the permit conflict with the approved site plans, these terms and conditions shall be deemed to supersede the site plans.
4. You must notify this Program in writing immediately prior to the commencement of site alterations and upon completion of the project.



5. A copy of the stamped approved site plans and a copy of this permit must be kept at the site at all times during site preparation, construction, and final stabilization. Copies of this permit and the stamped approved plans must be made available for review by any DEM representative upon request.
6. Within ten (10) days of the receipt of this permit, you must record this permit in the land evidence records of the Town of East Providence and supply this Program with written documentation obtained from the Town showing this permit was recorded.
7. The effective date of this permit is the date this letter was issued. This permit expires four (4) years from the date of issue.
8. Any material utilized in this project must be clean and free of matter that could pollute any freshwater wetland.
9. Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen (18) inches long, which boldly identifies the initials "DEM" and the application number of this permit. This sign must be maintained at the site in a conspicuous location until such time that the project is complete.
10. Temporary erosion and sediment controls detailed or described on the approved site plans shall be properly installed at the site prior to or commensurate with site alterations. Such controls shall be properly maintained, replaced, supplemented, or modified as necessary throughout the life of this project to minimize soil erosion and to prevent sediment from being deposited in any wetlands not subject to disturbance under this permit.
11. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls consisting of straw wattle, and/or silt fence, and turbidity barrier must be removed.
12. You are responsible for the proper operation, maintenance and stability of any mitigative features, facilities, and systems of treatment and control that are installed or used in compliance with this permit to prevent harm to adjacent wetlands.
13. You are obligated to install, utilize and follow all best management practices detailed or described on the approved site plans in the construction of the project to minimize or prevent adverse impacts to any adjacent freshwater wetlands and the functions and values provided by such wetlands.
14. All plantings of shrubs, trees or other forms of vegetation as shown or detailed on the approved plans, or detailed in this permit, must be installed as soon as possible after completion of final grading; weather and season permitting. You must notify this Program in writing upon completion of the required plantings for a compliance inspection by a Program representative.
15. Buffer zone plantings of trees and/or shrubs proposed between the project and any adjacent freshwater wetland areas, except for necessary replacement, must be allowed to develop naturally without being subjected to mowing or manicuring.
16. Any plantings which fail to survive one full growing season shall be replaced. Replacement plantings shall be similarly guaranteed for one full growing season.



17. You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales and any other stormwater management control features have been constructed/installed in accordance with the site plans approved by this permit. This written certification must be submitted to this Program within twenty (20) days of its request or upon completion of the project.

18. The long term operation and maintenance plan shall be strictly followed The long term O&M Plan shall be entitled "East Pointe Stormwater Operation and Maintenance Plan; Ferrucci Russo, P.C.," sated Revised September 2018, prepared by Weston & Sampson, 100 Foxborough Boulevard, Suite 250, Foxborough, MA 02035. Tel. 508-698-3034.

- 19 This Program has made specific revisions to the approved site plans. These revisions are clearly marked in red on the approved plans. Specifically, shrubs must be installed within perimeter wetland from the western edge of the proposed rip rap swale to the proposed limits of disturbance. Highbush blueberry and/or winterberry shrubs may be added to the planting scheme. All shrubs must be at least three (3) feet tall after planting and installed no greater than eight (8) feet on center throughout the required planting area. Additionally, erosion controls must be installed along the limits of disturbance associated with the area identified as "ELUR 'Area C'" on the plans. This project must take place in compliance with these revisions.

Pursuant to the provisions in Rule 7.09 and Rule 11.04, as applicable, any properly recorded and valid permit is automatically transferred to the new owner upon sale of the property.

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Rules at all times. Failure to do so may result in an enforcement action by this Department.

In permitting the proposed alterations, the DEM assumes no responsibility for damages resulting from faulty design or construction.

Kindly be advised that this permit is not equivalent to a verification of the type or extent of freshwater wetlands on site. Should you wish to have the types and extent of freshwater wetlands verified, you may submit the appropriate application in accordance with Rule 8.03.

This permit does not remove your obligation to obtain any local, state, or federal approvals or permits required by ordinance or law and does not relieve you from any duties owed to adjacent landowners with specific reference to any changes in drainage.

Application No. 18-0112
Page 4



Please contact Jane Kelly of this office (telephone: 401-222-6820 x7420) should you have any questions regarding this letter.

Sincerely,

A handwritten signature in black ink that reads "Martin D. Wencek".

Martin D. Wencek, Permitting Supervisor
Office of Water Resources
Freshwater Wetlands Program

MDW/JEK/jek

Enclosure: Approved site plans

cc: Stephen H. Coutu, East Providence Public Works Director X C
Sarah DeStefano, Weston and Sampson

RECEIVED
MARCH 1, 2022
 COASTAL RESOURCES
 MANAGEMENT COUNCIL



City of East Providence, Rhode Island

Plans for the Construction of East Pointe Development Boat Launch and Bicycle Path

Roger Williams Avenue
 East Providence, Rhode Island. 02916



FOR ILLUSTRATIVE PURPOSES ONLY

PERMITTING
 NOT FOR CONSTRUCTION

SHEET INDEX

C1.00.....	COVER
L1.00.....	OVERALL EXISTING CONDITIONS PLAN
L2.00.....	EXISTING CONDITIONS AND SITE PREPARATION PL
L3.00.....	STORMWATER MANAGEMENT PLAN
L3.01.....	ENLARGEMENT MATERIALS PLAN
D1.01.....	EROSION AND SEDIMENTATION CONTROL DETAILS
S1.00.....	GENERAL NOTES AND DOCK PLAN
S1.01.....	DOCK SECTIONS

NOV 03 2018
 18-0112
 DUANE C. HIMES
 No. 0044
 REGISTERED
 Duane C. Himes
 2/2018

June 2018

Prepared By

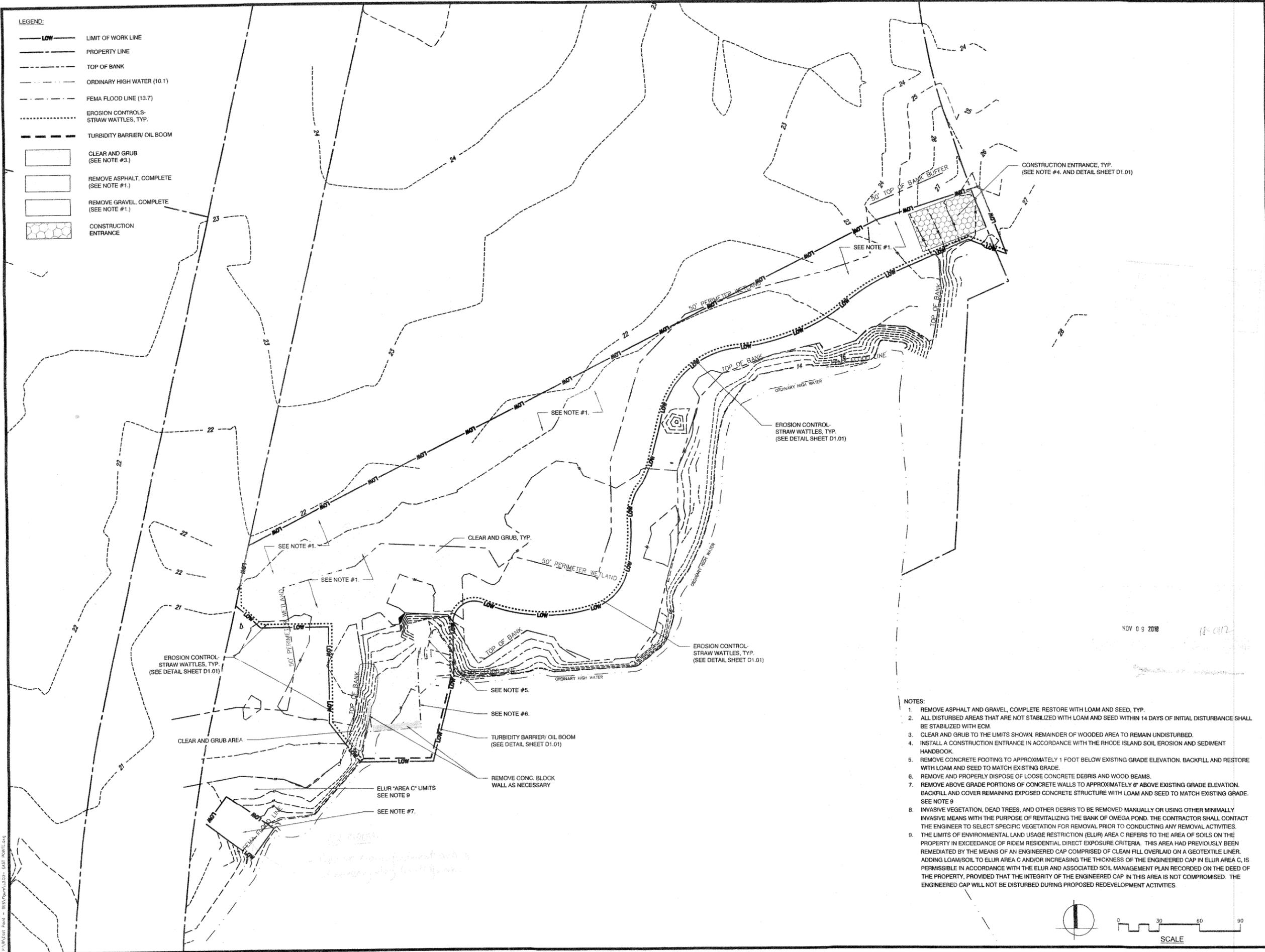
Weston & SampsonSM

427 Main Street, Suite 400, Worcester, MA
 (508) 698-3034 (800) Sampson
 www.westonandsampson.com

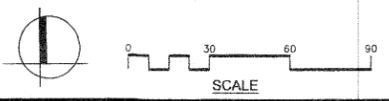
EAST POINTE
 LOCUS MAP

C1.00

- LEGEND:**
- LIMIT OF WORK LINE
 - PROPERTY LINE
 - TOP OF BANK
 - ORDINARY HIGH WATER (10.1)
 - FEMA FLOOD LINE (13.7)
 - EROSION CONTROLS- STRAW WATTLES, TYP.
 - TURBIDITY BARRIER/ OIL BOOM
 - CLEAR AND GRUB (SEE NOTE #3.)
 - REMOVE ASPHALT, COMPLETE (SEE NOTE #1.)
 - REMOVE GRAVEL, COMPLETE (SEE NOTE #1.)
 - CONSTRUCTION ENTRANCE



- NOTES:**
1. REMOVE ASPHALT AND GRAVEL, COMPLETE. RESTORE WITH LOAM AND SEED, TYP.
 2. ALL DISTURBED AREAS THAT ARE NOT STABILIZED WITH LOAM AND SEED WITHIN 14 DAYS OF INITIAL DISTURBANCE SHALL BE STABILIZED WITH ECM.
 3. CLEAR AND GRUB TO THE LIMITS SHOWN. REMAINDER OF WOODED AREA TO REMAIN UNDISTURBED.
 4. INSTALL A CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT HANDBOOK.
 5. REMOVE CONCRETE FOOTING TO APPROXIMATELY 1 FOOT BELOW EXISTING GRADE ELEVATION. BACKFILL AND RESTORE WITH LOAM AND SEED TO MATCH EXISTING GRADE.
 6. REMOVE AND PROPERLY DISPOSE OF LOOSE CONCRETE DEBRIS AND WOOD BEAMS.
 7. REMOVE ABOVE GRADE PORTIONS OF CONCRETE WALLS TO APPROXIMATELY 6" ABOVE EXISTING GRADE ELEVATION. BACKFILL AND COVER REMAINING EXPOSED CONCRETE STRUCTURE WITH LOAM AND SEED TO MATCH EXISTING GRADE. SEE NOTE 9.
 8. INVASIVE VEGETATION, DEAD TREES, AND OTHER DEBRIS TO BE REMOVED MANUALLY OR USING OTHER MINIMALLY INVASIVE MEANS WITH THE PURPOSE OF REVITALIZING THE BANK OF OMEGA POND. THE CONTRACTOR SHALL CONTACT THE ENGINEER TO SELECT SPECIFIC VEGETATION FOR REMOVAL PRIOR TO CONDUCTING ANY REMOVAL ACTIVITIES.
 9. THE LIMITS OF ENVIRONMENTAL LAND USAGE RESTRICTION (ELUR) AREA C REFERS TO THE AREA OF SOILS ON THE PROPERTY IN EXCEEDANCE OF RIDEM RESIDENTIAL DIRECT EXPOSURE CRITERIA. THIS AREA HAD PREVIOUSLY BEEN REMEDIATED BY THE MEANS OF AN ENGINEERED CAP COMPRISED OF CLEAN FILL OVERLAID ON A GEOTEXTILE LINER. ADDING LOAM/SOIL TO ELUR AREA C AND/OR INCREASING THE THICKNESS OF THE ENGINEERED CAP IN ELUR AREA C, IS PERMISSIBLE IN ACCORDANCE WITH THE ELUR AND ASSOCIATED SOIL MANAGEMENT PLAN RECORDED ON THE DEED OF THE PROPERTY, PROVIDED THAT THE INTEGRITY OF THE ENGINEERED CAP IN THIS AREA IS NOT COMPROMISED. THE ENGINEERED CAP WILL NOT BE DISTURBED DURING PROPOSED REDEVELOPMENT ACTIVITIES.



Project:
CITY OF EAST PROVIDENCE, RI

EAST POINTE DEVELOPMENT BOAT LAUNCH AND BICYCLE PATH

Weston & Sampson
427 Main Street,
Suite 400, Worcester, MA 01608
978.977.0110 800.SAMPSC
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description
1	18/20/17	REVISIONS PER COMMENTS

Seal: DUANE C. HIMES
6044
Professional Engineer
State of Rhode Island
DUANE C. HIMES

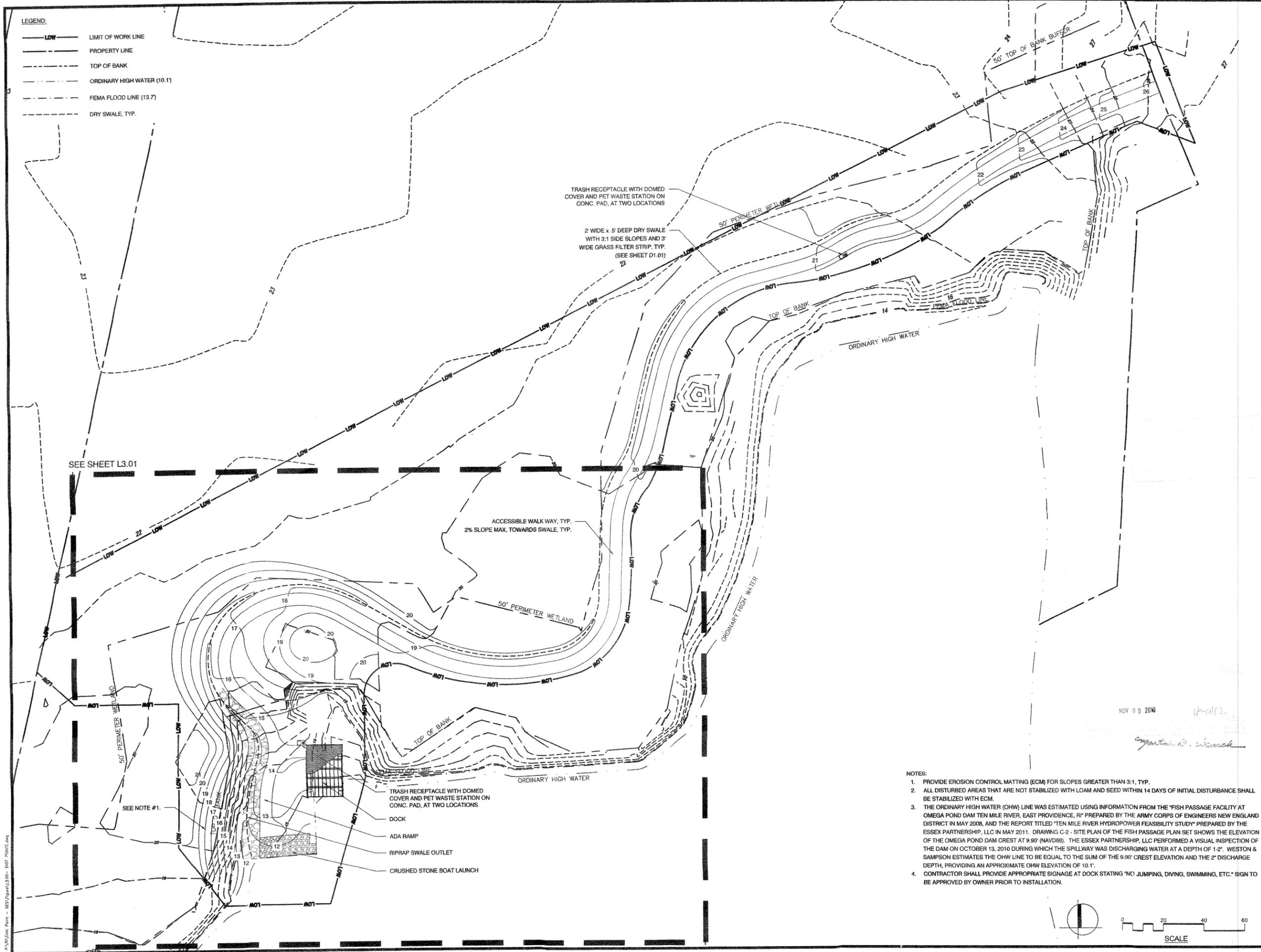
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PERMITTING NOT FOR CONSTRUCTION

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Date: JUNE, 2018
Drawn By: EJA
Reviewed By: MSM
Approved By: MSM
W&S Project No:
W&S File No:

Drawing Title:
EXISTING CONDITION AND SITE PREPARATION PLAN

Sheet Number:
L2.00
SHEET 3 OF 8

- LEGEND:**
- LOW — LIMIT OF WORK LINE
 - PROPERTY LINE
 - - - TOP OF BANK
 - - - ORDINARY HIGH WATER (10.1)
 - - - FEMA FLOOD LINE (13.7)
 - - - DRY SWALE, TYP.



- NOTES:**
1. PROVIDE EROSION CONTROL MATTING (ECM) FOR SLOPES GREATER THAN 3:1, TYP.
 2. ALL DISTURBED AREAS THAT ARE NOT STABILIZED WITH LOAM AND SEED WITHIN 14 DAYS OF INITIAL DISTURBANCE SHALL BE STABILIZED WITH ECM.
 3. THE ORDINARY HIGH WATER (OHW) LINE WAS ESTIMATED USING INFORMATION FROM THE 'FISH PASSAGE FACILITY AT OMEGA POND DAM TEN MILE RIVER, EAST PROVIDENCE, RI' PREPARED BY THE ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT IN MAY 2008, AND THE REPORT TITLED 'TEN MILE RIVER HYDROPOWER FEASIBILITY STUDY' PREPARED BY THE ESSEX PARTNERSHIP, LLC IN MAY 2011. DRAWING C-2 - SITE PLAN OF THE FISH PASSAGE PLAN SET SHOWS THE ELEVATION OF THE OMEGA POND DAM CREST AT 9.90' (NAVD88). THE ESSEX PARTNERSHIP, LLC PERFORMED A VISUAL INSPECTION OF THE DAM ON OCTOBER 13, 2010 DURING WHICH THE SPILLWAY WAS DISCHARGING WATER AT A DEPTH OF 1-2'. WESTON & SAMPSON ESTIMATES THE OHW LINE TO BE EQUAL TO THE SUM OF THE 9.90' CREST ELEVATION AND THE 2' DISCHARGE DEPTH, PROVIDING AN APPROXIMATE OHW ELEVATION OF 10.1'.
 4. CONTRACTOR SHALL PROVIDE APPROPRIATE SIGNAGE AT DOCK STATING 'NO JUMPING, DIVING, SWIMMING, ETC.' SIGN TO BE APPROVED BY OWNER PRIOR TO INSTALLATION.

Project:
CITY OF EAST PROVIDENCE, RI

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 427 Main Street,
 Suite 400, Worcester, MA 01608
 978.977.0110 800.SAMPSON
 www.westonandsampson.com

Consultants:

RECEIVED
MARCH 1, 2022
 COASTAL RESOURCES
 MANAGEMENT COUNCIL

Revisions:

No.	Date	Description
1	18/20/17	REVISIONS PER COMMENTS

Seal:

 Issued For: *[Signature]*

**PERMITTING
 NOT FOR CONSTRUCTION**

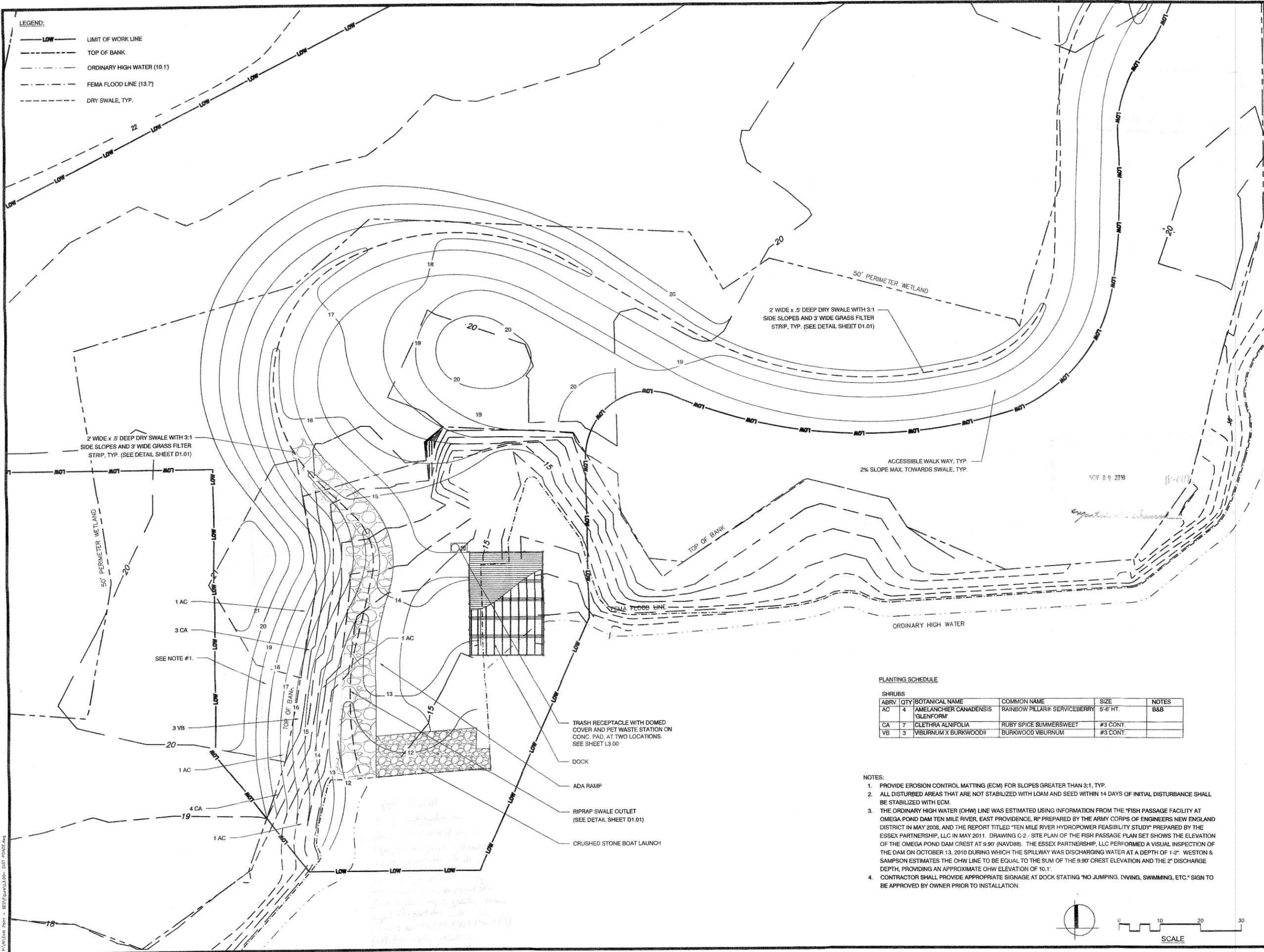
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 Date: JUNE, 2018
 Drawn By: EJA
 Reviewed By: MSM
 Approved By: MSM
 W&S Project No:
 W&S File No:

Drawing Title:
**STORMWATER
 MANAGEMENT PLAN**

Sheet Number:
L3.00
 SHEET 4 OF 8

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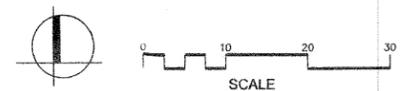
LEGEND:
 - - - - - LOW LIMIT OF WORK LINE
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 - - - - - FEMA FLOOD LINE (13.7)
 - - - - - DRY SWALE, TYP.



PLANTING SCHEDULE

ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
AC	4	AMELANCHIER CANADENSIS 'GLENFORM'	RAINBOW PILLAR® SERVICEBERRY	5'-6" HT.	B&B
CA	7	CLETHRA ALNIFOLIA	RUBY SPICE SUMMERSWEET	#3 CONT.	
VB	3	VIBURNUM X BURKWOODII	BURKWOOD VIBURNUM	#3 CONT.	

- NOTES:**
1. PROVIDE EROSION CONTROL MATTING (ECM) FOR SLOPES GREATER THAN 3:1, TYP.
 2. ALL DISTURBED AREAS THAT ARE NOT STABILIZED WITH LOAM AND SEED WITHIN 14 DAYS OF INITIAL DISTURBANCE SHALL BE STABILIZED WITH ECM.
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Consultants:


Revisions:

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Seal: DUANE C. HIMES

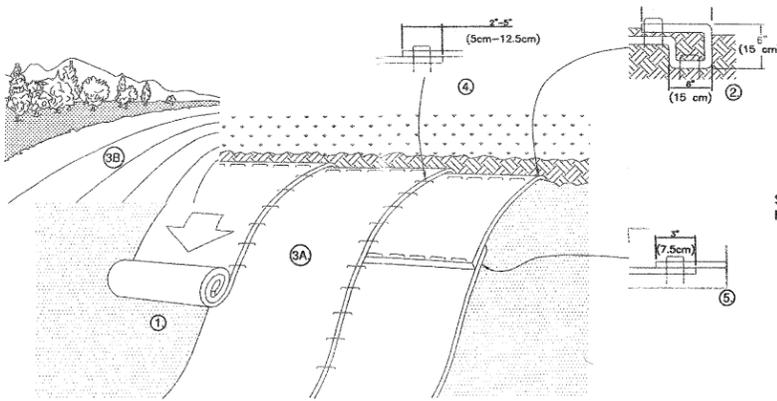

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 Drawn By: EJA
 Reviewed By: MSM
 Approved By: MSM
 W&S Project No:
 W&S File No:

Drawing Title:
ENLARGEMENT MATERIALS PLAN

Sheet Number:
L3.01
 SHEET 5 OF 8

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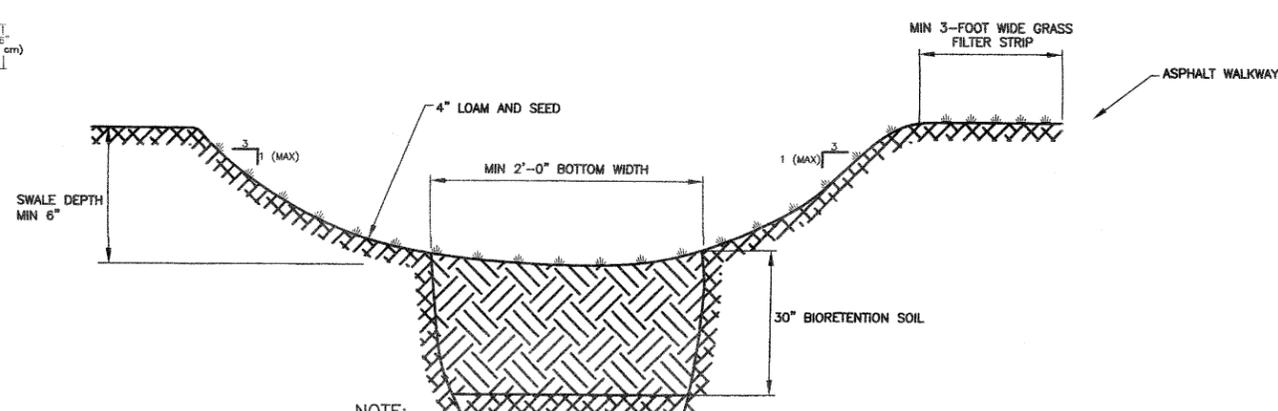


EROSION CONTROL MATTING (ECM)

N.T.S.

NOTES:

1. PREPARE SOIL BEFORE INSTALLING, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE ECM IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH.
3. ROLL THE ECM (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. ALL ECM MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL ECM MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON ECM TYPE.
5. CONSECUTIVE ECM SPliced DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE ECM WIDTH.

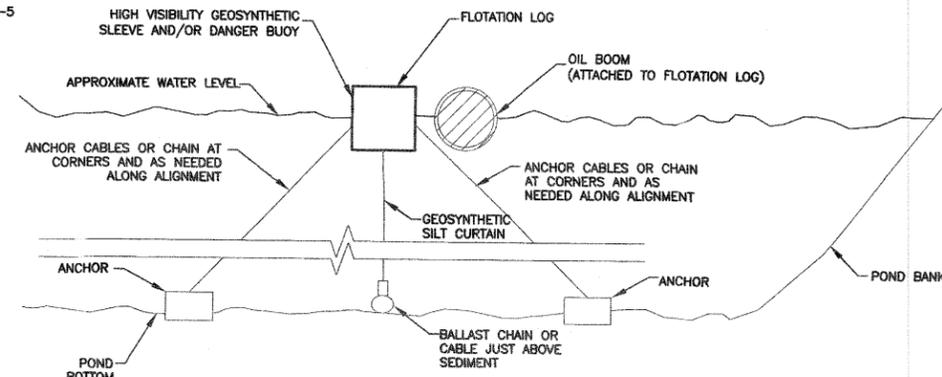


NOTE:

THE MARCH 9, 2004 BORING LOG FOR BORING LOCATION B-5 (FOR LOCATION REFER TO ATTACHMENT B - PROPOSED CONDITIONS DRAINAGE MAP OF THE DRAINAGE NARRATIVE), INCLUDED AS ATTACHMENT D OF THE DRAINAGE NARRATIVE, INDICATES GROUNDWATER AT APPROXIMATELY 9 FEET BELOW GRADE.

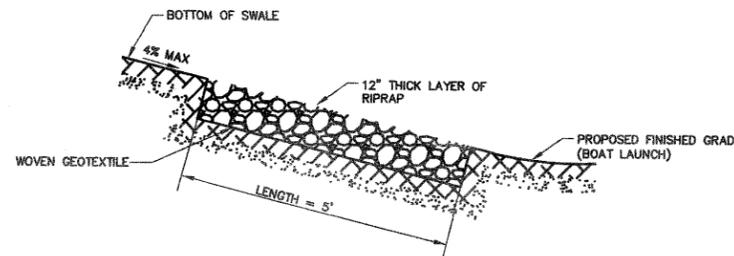
DRY SWALE DETAIL

N.T.S.



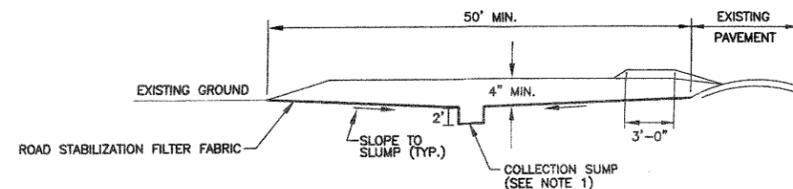
TURBIDITY BARRIER/OIL BOOM DETAIL

N.T.S.

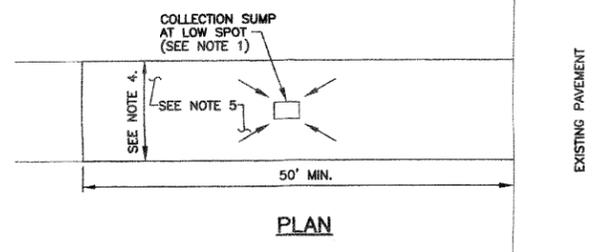


RIP RAP FOR SWALE OUTLET

N.T.S.



PROFILE



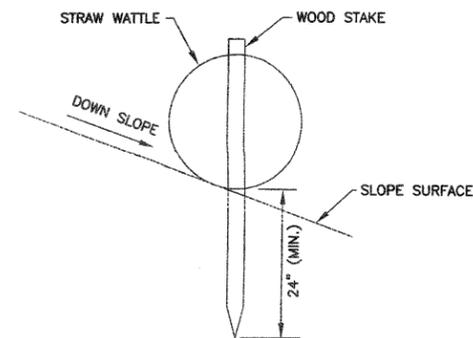
PLAN

NOTES:

1. VEHICLES SHALL BE BRUSH CLEANED TO REMOVE SOIL/DEBRIS PRIOR TO EXITING. IF, AS DETERMINED BY THE ENGINEER, BRUSH CLEANING IS NOT EFFECTIVE IN DECONTAMINATING VEHICLES, THEN THE CONTRACTOR SHALL FLUID WASH THE VEHICLES. WASH STATION SHALL BE CONSTRUCTED WITH A 20 MIL HDPE LINER SYSTEM TO DRAIN TO 2" DEEP HDPE LINED COLLECTION SUMP. DECONTAMINATION WATER IN THE COLLECTION SUMP SHALL BE PUMPED TO A DECONTAMINATION WATER STORAGE VESSEL AND SHALL BE DISPOSED OF AT A LICENSED DISPOSAL FACILITY.
2. THE TRUCK WASH STATION SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SOIL/DEBRIS ONTO ADJACENT PAVED AREAS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF THE COLLECTION SUMP. ALL SOIL/DEBRIS SPILLED, DROPPED, WASHED OR TRACKED ONTO ADJACENT PAVEMENT MUST BE REMOVED IMMEDIATELY.
3. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
4. WIDTH OF THE CONSTRUCTION ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF POINTS OF INGRESS OR EGRESS.
5. AGGREGATE TO BE USED SHALL BE ASTM C-33, SIZE NO. 2 OR 3, OR RHODE ISLAND DEPARTMENT OF TRANSPORTATION (RIDOT) 2" SIZE CRUSHED STONE OR GRAVEL.

CONSTRUCTION ENTRANCE

N.T.S.

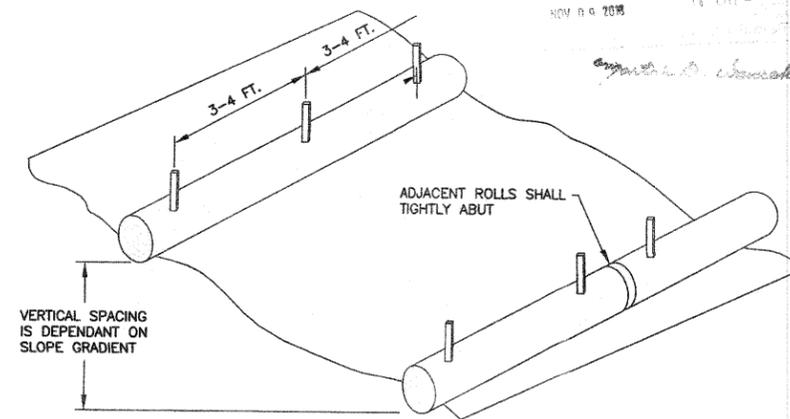


STAKE DETAIL (ON BARE SOIL)

N.T.S.

NOTES:

1. WATTLE CASING TO BE CONSTRUCTED OF NON-WOVEN GEOTEXTILE FILTER CLOTH OR BIODEGRADABLE JUTE MESH.
2. WATTLES TO BE FILLED WITH BIODEGRADABLE STRAW FILL OR CHIPPED WOOD.
3. SECURE THE WATTLE WITH 18-24" STAKES EVERY 3-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.
4. POST-CONSTRUCTION WATTLE CASING AND STAKES WILL BE REMOVED FOLLOWING THE REMOVAL OF SEDIMENT BUILDUP, AND BIODEGRADABLE STRAW WILL BE SPREAD.



STRAW WATTLE INSTALLATION GUIDE

N.T.S.

Project:
CITY OF EAST PROVIDENCE, RI

EAST POINT DEVELOPMENT BOAT LAUNCH AND BICYCLE PATH

Weston & Sampson
427 Main Street,
Suite 400, Worcester, MA 01608
978.977.0110 800.SAMPSO
www.westonandsampson.com

Consultants:

RECEIVED
MARCH 1, 2022
COASTAL RESOURCES
MANAGEMENT COUNCIL

Revisions:

No.	Date	Description
1	10/20/17	REVISIONS PER COMMENTS

Seal: DUANE C. HIMES

NOV 10 2018
DUANE C. HIMES
REGISTERED PROFESSIONAL ENGINEER
STATE OF RHODE ISLAND
4/2018

Issued For:
PERMITTING
NOT FOR CONSTRUCTION

Scale: AS SHOWN
Date: JUNE, 2018
Drawn By: EJA
Reviewed By: MSM
Approved By: MSM
W&S Project No:
W&S File No:

Drawing Title:
EROSION AND
SEDIMENTATION
CONTROL DETAILS

Sheet Number:
D1.01
SHEET 6 OF 8

P:\V\East Point - SESY\Plan\04-1 Ecm Details rev10.22.17.dwg

1.0 GENERAL NOTES

- 1.1 ALL WORK SHALL CONFORM TO THE CURRENT EDITION OF THE RHODE ISLAND STATE BUILDING CODE AND ITS APPLICABLE REFERENCES.
- 1.2 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING, COORDINATING, AND VERIFYING ALL DIMENSIONS AND CONDITIONS IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF WORK.
- 1.3 ALL BOLTS & HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A 307, OR STAINLESS STEEL.

2.0 CONCRETE

- 2.1 CONCRETE WORK SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-11/318R-11) AND SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301-11).
- 2.2 CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4500 PSI AND A MAXIMUM WATER-CEMENT RATIO OF 0.45.
- 2.3 CEMENT SHALL CONFORM TO ASTM C 150 TYPE III.
- 2.4 MAXIMUM SLUMP OF CAST-IN-PLACE CONCRETE SHALL BE 4"
- 2.5 ALL CONCRETE SHALL HAVE AN AIR CONTENT OF 6%.
- 2.6 ALL EXPOSED CORNERS OF CONCRETE SLAB SHALL HAVE A 1" CHAMFER UNLESS OTHERWISE NOTED.
- 2.7 AN INDEPENDENT TESTING AGENCY SHALL PERFORM CONCRETE TESTING EACH DAY OF CONCRETE PLACEMENTS AND EVERY 65 CY TESTING SHALL INCLUDE SLUMP, AIR CONTENT, TEMPERATURE, AND CYLINDERS FOR STRENGTH TESTING PER RELEVANT ACI AND ASTM STANDARDS.

3.0 REINFORCING

- 3.1 REINFORCEMENT WORK OF DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-11/318R-11), ACI DETAILING MANUAL (CP-188), ACI MANUAL OF STANDARD PRACTICE (M-4-99), AND STRUCTURAL WELDING CODE REINFORCING STEEL (AWS D1.4:99) AT MINIMUM OR AS SPECIFIED HEREIN.
- 3.2 STEEL REINFORCEMENT, UNLESS OTHERWISE NOTED, SHALL CONFORM ASTM A615 GRADE 60.
- 3.3 MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE 2" @
- 3.4 REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS UNLESS OTHERWISE INDICATED.
- 3.5 REINFORCEMENT SHALL NOT BE TACK WELDED.
- 3.6 INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT.

4.0 TIMBER CONSTRUCTION

- 4.1 THE WORK COVERED UNDER THIS SECTION INCLUDES, BUT IS NOT NECESSARILY LIMITED TO STRINGERS, CAPS AND PILES.
- 4.2 ALL VISUALLY GRADED STRUCTURAL LUMBER AND WOOD CONSTRUCTION SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (ANSI/APA NDS - LATEST EDITION), ITS SUPPLEMENT, AND COMMENTARY BY THE AMERICAN FOREST & PAPER ASSOCIATION / AMERICAN WOOD COUNCIL.
- 4.3 TIMBER SHALL MEET THE REQUIREMENTS OF THE SOUTHERN PINE INSPECTION BUREAU INSPECTION RULES, LATEST EDITION FOR SOUTHERN YELLOW PINE NO. 1 GRADE MINIMUM.
- 4.4 TIMBER SHALL BE HANDLED CAREFULLY, WITHOUT SUDDEN DROPPING, BREAKING OF OUTER FIBERS, BRUISING OR PENETRATING THE SURFACE WITH TOOLS.
- 4.5 TIMBER SHALL BE CUT AND FRAMED TO A CLOSE FIT IN SUCH A MANNER THAT THE JOINTS SHALL HAVE AN EVEN BEARING OVER THE ENTIRE CONTACT SURFACE.
- 4.6 TIMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) CATEGORY C1 WITH A DCA TO A RETENTION OF 0.3 POUNDS PER CUBIC FOOT.
- 4.7 TIMBER SHALL BE COATED WITH A COPPER NAP (HEALTHY SOLUTION) WITH NO LESS THAN 2% COPPER METAL CONTENT TO BE APPROVED BY THE ENGINEER.
- 4.8 TIMBER SHALL BE WELL SEASONED, AND STRAIGHT GRAINED, FREE FROM CHAKES AND LARGE OR LOOSE KNOTS, AND SHALL HAVE NO DECAYED OR OTHER DEFECTS WHICH THE OWNER DETERMINES WILL IMPAIR ITS STRENGTH OR DURABILITY.
- 4.9 TIMBER SHALL BE STORED ON A LEVEL SURFACE AND SHALL BE PROTECTED FROM WEATHER. WEIGHT MATERIAL WILL NOT BE ACCEPTED.
- 4.10 TIMBER SHALL BE STORED IN A MANNER TO PREVENT DAMAGE AND TO PERMIT DAILY INSPECTION.
- 4.11 TIMBER SHALL BE STORED ON A LEVEL SURFACE (S48) UNLESS OTHERWISE NOTED.
- 4.12 TIMBER SHALL BE STORED ON STRONG-TIE CONNECTIONS OR APPROVED EQUAL SHALL BE UTILIZED AS SPECIFIED WITHIN THESE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO PLACING ORDER.
- 4.13 WHERE REQUIRED, SURE THAT THERE IS NO INTERFERENCE BETWEEN DECK BOARDS OR OTHER

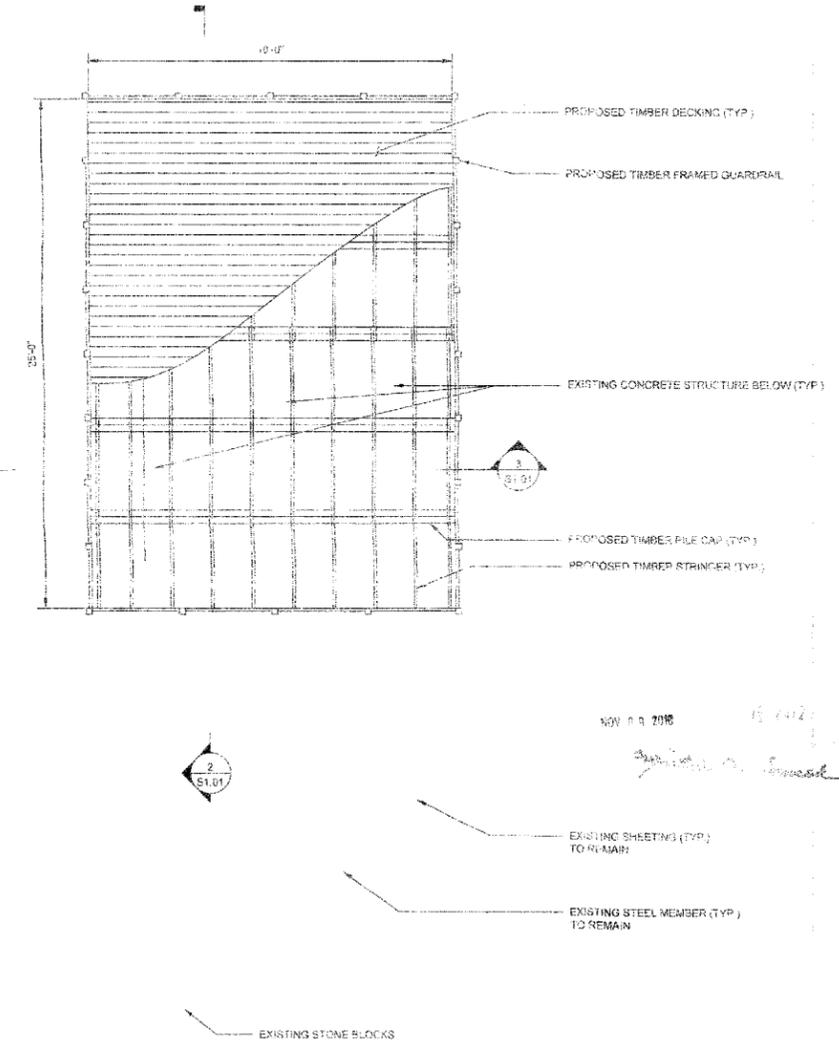
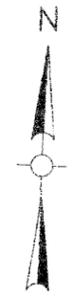
6.0 DESIGN LOADS

LOADS, LOADING CONDITIONS, AND COMBINATIONS SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND STATE BUILDING CODE 11th EDITION, IBC 2012 AND ASCE 7-10 AS APPLICABLE.

LOADS DESIGNATED BY "PSF" ARE UNIFORM LOADS. THOSE DESIGNATED BY "LB" ARE CONCENTRATED LOADINGS AND SHALL BE APPLIED AS REQUIRED BY THE RI STATE BUILDING CODE.

BUILDING OCCUPANCY CATEGORY _____ II

- DEAD LOADS
 - SELF-WEIGHT OF ALL ATTACHED ELEMENTS _____
- LIVE LOADS
 - DECK _____ 100 PSF
- SNOW LOAD
 - GROUND SNOW LOAD, PG _____ 30 PSF
 - UNHEATED STRUCTURES
 - FLAT SNOW ROOF LOAD, PF MIN _____ 30 PSF
 - SNOW EXPOSURE FACTOR, CE _____ 0.9
 - SNOW LOAD IMPORTANCE FACTOR, I _____ 1.0
 - THERMAL FACTOR, CT _____ 1.2
- WIND DESIGN DATA
 - BASIC WIND SPEED, V _____ 114 MPH
 - WIND IMPORTANCE FACTOR, I _____ 1.0
 - WIND EXPOSURE FACTOR, C _____ C
- EARTHQUAKE DESIGN DATA
 - SEISMIC IMPORTANCE FACTOR, I _____ 1.0
 - MAPPED SPECTRAL RESPONSE ACCELERATIONS, SS, S1 _____ 1.77, 0.081
 - SITE CLASS _____ D



1 PROPOSED DECK PLAN
SCALE: 3/16" = 1'-0"

Project:
CITY OF EAST PROVIDENCE, RI

EAST POINTE- SES

Weston & Sampson

427 Main Street
Suite 203, Worcester, MA 01001
617.977.0110 800.5AMPSON
www.westonandsampson.com

Consultants:

RECEIVED
MARCH 1, 2022
COASTAL RESOURCES
MANAGEMENT COUNCIL

Revisions

No.	Date	Description

Scale:

AS SHOWN

Issued For:

PERMITTING
NOT FOR CONSTRUCTION

Scale: AS SHOWN

Date: JUNE 7, 2018

Drawn By: NLY

Reviewed By: NLR

Approved By: NMS

WBS Project No:

WBS File No:

Drawing Title:
EAST POINTE
DEVELOPMENT BOAT
LAUNCH AND BICYCLE
PATH

GENERAL NOTES AND
DECK PLAN

Sheet Number:
S1.00
SHEET 7 OF 8



AT-GRADE GRANITE STEP ACCESS
(SHOWN FOR CONCEPTUAL ARCHITECTURAL STYLE AND CHARACTER)



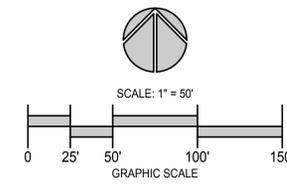
GRANITE BLOCK BENCHES
(SHOWN FOR CONCEPTUAL ARCHITECTURAL STYLE AND CHARACTER)

LANDSCAPE LEGEND

- EVERGREEN TREE PLANTING:**
(Installation Size: 6"-7")
EXAMPLE PLANTINGS:
Ilex opaca (American Holly)
Pinus rigida (Pitch Pine)
Juniperus virginiana (Eastern Red Cedar)
Thuja plicata (Western Red Cedar)
- SHADE TREE PLANTING:**
(Installation Size: 2.5"-3" Cal.)
EXAMPLE PLANTINGS:
Acer rubrum (Red Maple)
Nyssa sylvatica (Tupelo)
Quercus alba (White Oak)
Quercus palustris (Pin Oak)
- FLOWERING/ORNAMENTAL TREE PLANTING:**
(Installation Size: 8"-10")
EXAMPLE PLANTINGS:
Amelanchier 'Autumn Brilliance' (Autumn Brilliance Shadblow)
Betula populifolia 'Whitespire' (Whitespire Birch)
Magnolia virginiana (Sweetbay Magnolia)
Prunus serrulata 'Kwanan' (Kwanan Cherry)
- SUPPLEMENTAL NATIVE MIXED SHRUB BORDER:**
(Installation Size: 3"-11" Cal.)
EXAMPLE PLANTINGS:
Cornus sericea (Redtwig Dogwood)
Hydrangea arborescens (Smooth Hydrangea)
Hydrangea paniculata (Panicled Hydrangea)
Ilex glabra (Inkberry)
Ilex verticillata (Winterberry)
Myrica pennsylvanica (Blackberry)
Viburnum dentatum (Arrowwood)
- COASTAL MEADOW GRASSES:**
(RI State Native Mix, or Approved Equal)
30% Hard Fescue
25% Perennial Rye
25% Little Bluestem
20% Switchgrass
- STONEDUST PUBLIC ACCESS PATH:**
(See Detail)
- 8' MIN WIDTH MOWED PUBLIC ACCESS PATH:**
(Mowed RI State Native Mix, or Approved Equal)
- PERVIOUS PAVEMENT PROMENADE SURFACING:**
(See Detail)

GENERAL LEGEND

- PROPERTY LINE
- ABUTTER PROPERTY LINE
- ACCESS EASEMENT LINE
- FENCE LINE
- TOPOGRAPHIC CONTOUR
- SEWER MAIN (18")
- SEWER MAIN (DIA. UNIDENTIFIED)
- GAS MAIN (6")
- GAS MAIN (8")
- GAS MAIN (12")
- GAS MAIN (DIA. UNIDENTIFIED)
- WATER MAIN (10")
- DRAIN LINE (DIA. UNIDENTIFIED)
- OVERHEAD WIRES
- SEWER FORCE MAIN
- 50' SETBACK FROM COASTAL FEATURE / WETLAND
- COASTAL FEATURE FLAG
- FRESHWATER WETLAND FLAG
- IRON ROD
- SURVEY NAIL
- CONCRETE BOUND
- FIRE HYDRANT
- DRAIN MANHOLE
- CATCH BASIN INLET
- SEWER MANHOLE
- PROPOSED 25' CONSTRUCTION SETBACK
- PROPOSED DRAIN LINE
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED LIGHT LOCATION (APPROXIMATE) (SEE LIGHTING PLANS)
- PROPOSED URBAN COASTAL GREENWAY (UCG) EASEMENT AREA (SEE APPROVED EASEMENT)



REVISION HISTORY:

DATE	REVISION
6/21/21	Site Layout, Grading, and Lighting Locations and Adjusted Plantings
2/23/22	Revised per CRMC Comments, Dated 12/21/21

- REFERENCES:**
- Plan Entitled: "East Point": MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE, RHODE ISLAND: GRADING AND DRAINAGE (COASTAL SIDE); Drawing Number C-10, Sheet 10 of 23; Client/Owner: Noble Development, LLC; As Prepared by: Northeast Engineers and Consultants, Inc.; Dated: 17APR21, as amended; Scale: 1"=50'
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East Point



Map 203, Block 1, Lot 4 & Map 303, Block 13, Lots 4 & 5 Roger Williams Avenue East Providence, RI

Owner/Prepared For:
Nobel Development, LLC
10 Green Street
Providence, RI 02903



Kevin M. Alverson
LANDSCAPE ARCHITECTURE
360 Annapauket Road 401-338-0044
Wickford, RI 02852 KevinAlversonLA.com



LANDSCAPE PLANTING ONLY

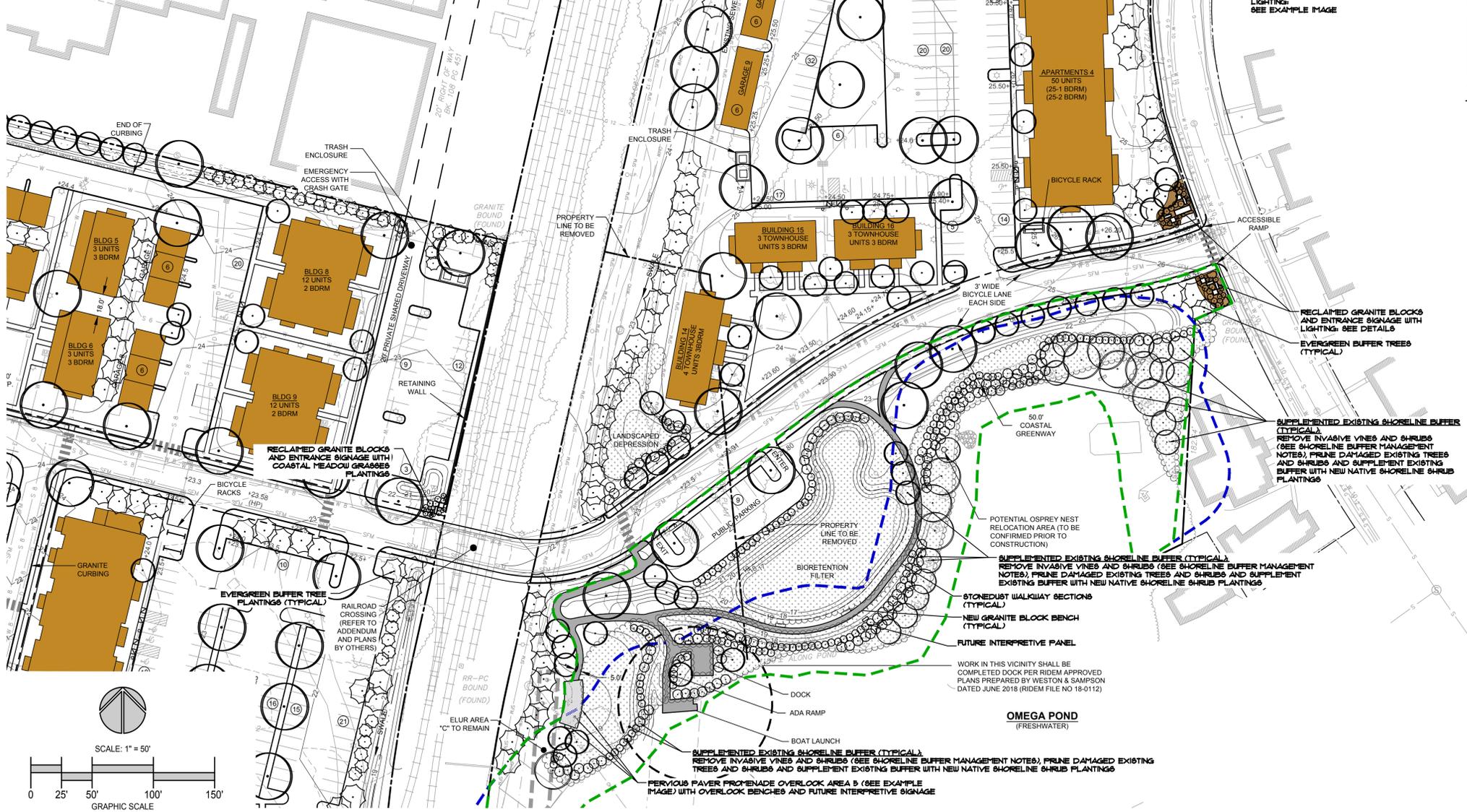
Landscape Master Plan (Coastal Side)

Project #: 2.291.316	Sheet 1 of 8
Scale: 1" = 50'	L-1
Drawn By: KMA	
Checked By: KMA	
Date: April 22, 2021	ISSUED FOR PERMITTING

2.291.316 Roger Williams-BourneAve(East Point).dwg

LANDSCAPE LEGEND

- EVERGREEN TREE PLANTING:**
(Installation Size: 8" J1)
Pinus strobus (White Pine)
Ilex opaca (American Holly)
Picea glauca (White Spruce)
Juniperus virginiana (Eastern Red Cedar)
Thuja plicata (Western Red Cedar)
- SHADE TREE PLANTING:**
(Installation Size: 2.5" - 3" Cal.)
Acer rubrum (Red Maple)
Betula nigra (Dura-Heat River Birch)
Fagus grandifolia (American Beech)
Liquidambar styraciflua (Tulip Tree)
Nyssa sylvatica (Tupelo)
Quercus alba (White Oak)
Quercus prinus (Pin Oak)
- FLOWERING/ORNAMENTAL TREE PLANTING:**
(Installation Size: 8" J1)
Betula populifolia 'Whitespire' (Whitespire Birch)
Chionanthus virginicus (Eastern Fringe Tree)
Cercis canadensis (Eastern Redbud)
Magnolia virginiana (Sweetbay Magnolia)
Prunus serotina (Black Cherry)
- SUPPLEMENTAL NATIVE MIXED SHRUB BORDER:**
(Installation Size: #3 (3 Gal))
Clethra alnifolia (Summersweet)
Corymbium floridanum (Carolina All Spice)
Cornus sericea (Redtwig Dogwood)
Vaccinium Corymbosum (Highbush Blueberry)
Hydrangea arborescens (Smooth Hydrangea)
Hydrangea paniculata (Panicled Hydrangea)
Ilex glabra (Inkberry)
Ilex verticillata (Winterberry)
Viburnum dentatum (Arrowwood)
Viburnum plicatum 'Tomentosa' (Doublefile Viburnum)
Viburnum trilobum (American Cranberry Bush)
- COASTAL MEADOW GRASSES:**
(RI State Native Mix, or Approved Equal)
30% Hard Fescue
25% Perennial Rye
25% Little Bluestem
20% Switchgrass
- STONEDUST PUBLIC ACCESS PATH:**
(See Detail)
- 8" MIN WIDTH MOWED PUBLIC ACCESS PATH:**
(Mowed RI State Native Mix, or Approved Equal)
- PERVIOUS PAVEMENT PUBLIC ACCESS PROMENADE SURFACING:**
(See Detail)



PERVIOUS PAVEMENT PROMENADE
(SHOWN FOR CONCEPTUAL ARCHITECTURAL STYLE AND CHARACTER)



SCULPTURAL BIKE RACK
(SHOWN FOR CONCEPTUAL ARCHITECTURAL STYLE AND CHARACTER)

GENERAL LEGEND

- PROPERTY LINE
- ABUTTER PROPERTY LINE
- ACCESS EASEMENT LINE
- FENCE LINE
- TOPOGRAPHIC CONTOUR
- SEWER MAIN (18")
- SEWER MAIN (DIA. UNIDENTIFIED)
- GAS MAIN (8")
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- 50' SETBACK FROM COASTAL FEATURE / WETLAND
- COASTAL FEATURE FLAG
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- PROPOSED 25' CONSTRUCTION SETBACK
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- PROPOSED LIGHT LOCATION (APPROXIMATE) (SEE LIGHTING PLAN(S))
- PROPOSED URBAN COASTAL GREENWAY (UCG) EASEMENT AREA (SEE APPROVED EASEMENT)

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East Point



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East Providence, RI

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LANDSCAPE PLANTING ONLY

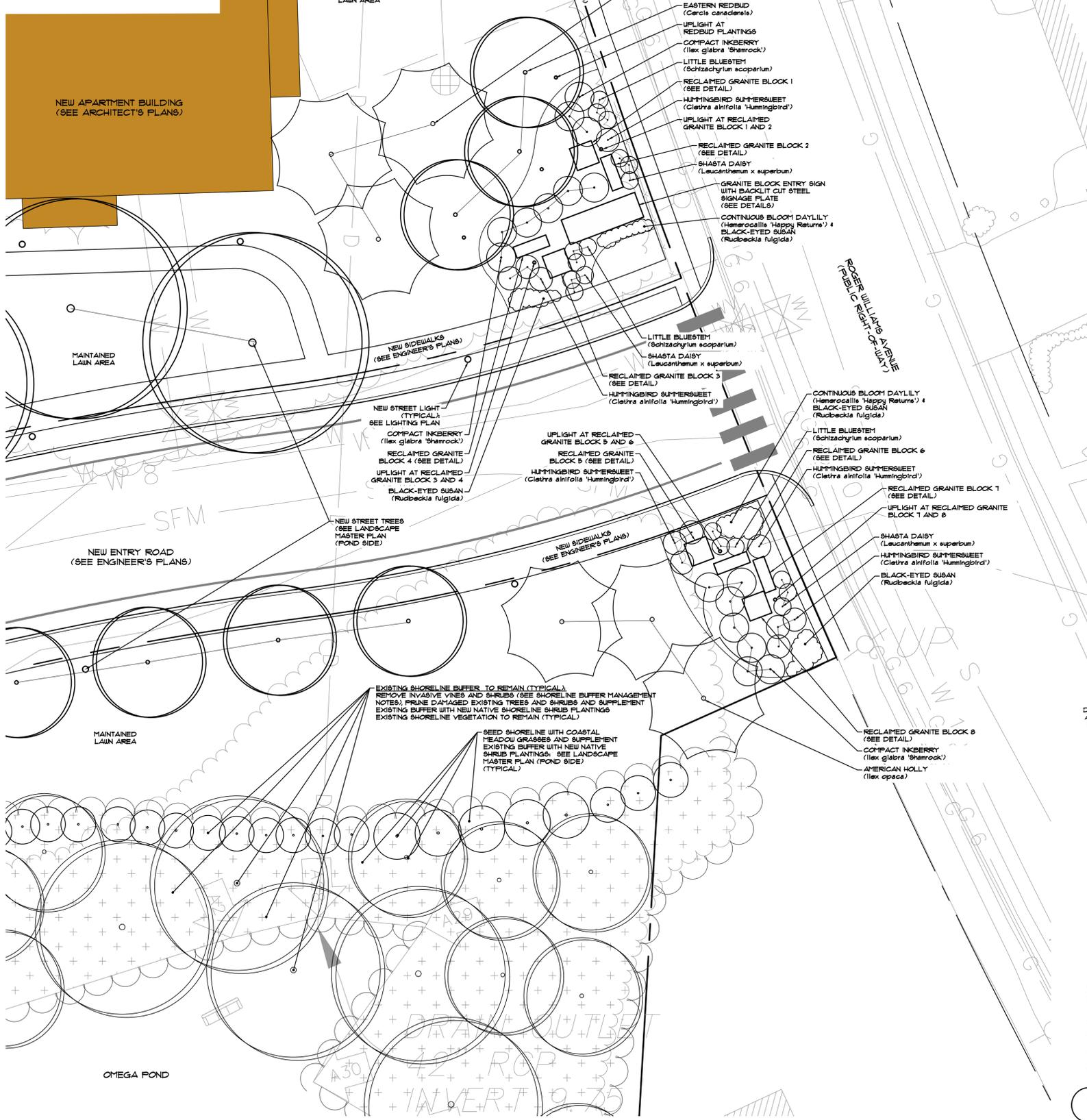
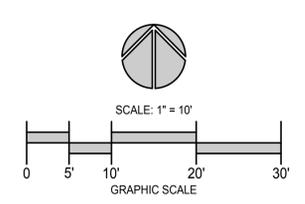
Landscape Master Plan (Pond Side)

Project #: 2.291.316 Sheet 2 of 8

Scale: 1" = 50'
Drawn By: KMA
Checked By: KMA
Date: April 22, 2021

L-2
ISSUED FOR PERMITTING

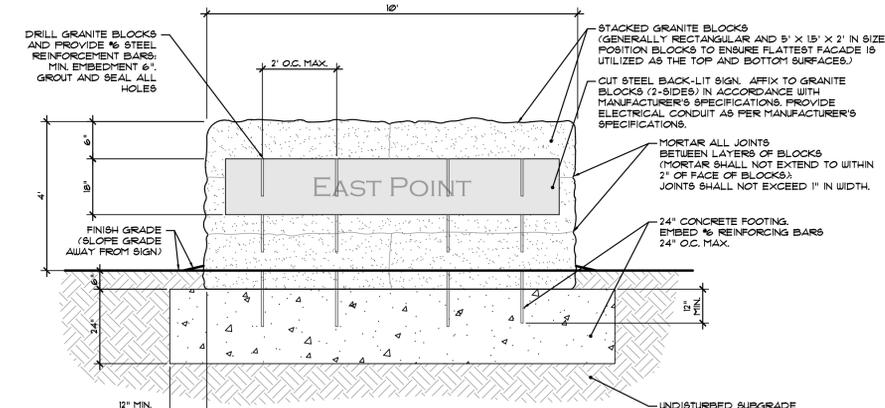
© Kevin M. Alverson, LA



BACKLIT CUT STEEL SIGNAGE EXAMPLE IMAGE (NATURAL PATINA RAW STEEL, CUT AND SET 6" FROM GRANITE BLOCK BASE) (SHOWN FOR CONCEPTUAL ARCHITECTURAL STYLE AND CHARACTER)



RECLAIMED GRANITE BLOCKS AT ENTRY SIGNAGE (SHOWN FOR CONCEPTUAL ARCHITECTURAL STYLE AND CHARACTER)



- NOTE:
1. GRANITE BLOCKS TO BE SIMILAR TO RECLAIMED SEAWALL GRANITE AS AVAILABLE THROUGH DIVERSIFIED MATERIALS IN NORTH KINGSTOWN RI, OR EQUAL. BLOCKS TO BE REVIEWED WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. FINAL ORIENTATION AND LOCATION OF BOLDER TO BE AS DIRECTED ON-SITE BY OWNER'S REPRESENTATIVE.
 2. STAGGER ALL JOINTS BETWEEN COURSES OF BLOCKS.
 3. SIGNAGE LOGO, FONT, ETC. ARE TO BE DETERMINED. OWNER SHALL WORK WITH GRAPHIC DESIGNER TO ESTABLISH DEVELOPMENT BRANDING AND LOGO INFORMATION. PROOFS FOR CUT STEEL BACKLIT SIGNAGE TO BE PROVIDED TO OWNER FOR REVIEW AND APPROVAL BEFORE MANUFACTURE.
 4. SIGN MANUFACTURER TO SUPPLY SIGN MOUNTING HARDWARE AND LIGHTING. ALL SIGN COMPONENTS TO BE INSTALLED IN ACCORDANCE WITH SIGN MANUFACTURER'S SPECIFICATIONS. CONTRACTOR TO PROVIDE ELECTRICAL CONDUIT TO SIGN LIGHTING AS PER SIGN MANUFACTURER.
 5. PROVIDE LOCKABLE WEATHER- AND TAMPER RESISTANT OUTDOOR OUTLET AT GRANITE SIGN FOR SUPPLEMENTAL AND/OR SEASONAL LIGHTING AND POWER FOR TOOL/APPLIANCES FOR PROPER MAINTENANCE.

1 ROGER WILLIAMS AVENUE ENTRY SIGN DESIGN

NOT TO SCALE

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East Point

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MARCH 1, 2022
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MANAGEMENT COUNCIL

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LANDSCAPE PLANTING ONLY

Landscape Design:
Roger Williams Ave.
Project Entrance

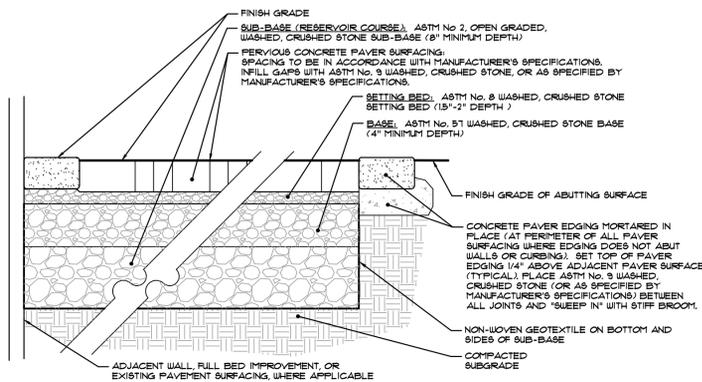
Project #: 2.291.316	Sheet 3 of 8
Scale: 1" = 10'	L-3 ISSUED FOR PERMITTING
Drawn By: KMA	
Checked By: KMA	
Date: April 22, 2021	

GENERAL NOTES:

- SEE ENGINEER'S PLANS FOR ALL SITE LAYOUT, GRADING, DRAINAGE, AND UTILITY DESIGNS (SEE REFERENCES).
- ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE RHODE ISLAND STANDARD SPECIFICATIONS, AS AMENDED.
- THIS PLAN IS FOR PERMITTING PURPOSES AND IS INTENDED TO BE AN ACCURATE GUIDELINE FOR LAYOUT AND SPECIFICATION OF LANDSCAPE PLANTINGS ONLY. CONTRACTOR SHALL VERIFY ACTUAL AS-BUILT ON-SITE CONDITIONS PRIOR TO COMMENCING CONSTRUCTION PROCEDURES. FINAL ALIGNMENT OF ALL LANDSCAPE IMPROVEMENTS SHALL BE ADJUSTED ON-SITE AS NECESSARY TO AVOID CONFLICTS WITH OTHER PROPOSED SITE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, UTILITY AND DRAINAGE DESIGN AND FINAL DESIGN/LAYOUT OF ROADWAYS, SIDEWALKS, AND PROPOSED STRUCTURES.
- UTILITIES ARE PLOTTED FROM BEST AVAILABLE INFORMATION AND SITE OBSERVATIONS. CONTRACTOR SHALL VERIFY UTILITY LOCATIONS BY CONTACTING DIG SAFE (888-DIG-SAFE (344-7233) or Dial 811), IN ACCORDANCE WITH THE LAWS OF THE STATE OF RI. CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING CONSTRUCTION. DAMAGE TO ANY ABOVE OR BELOW-GROUND UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OR HER OWN EXPENSE.
- ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR REUSE. DO NOT REMOVE LOAM FROM SITE UNLESS DIRECTED BY OWNER'S REPRESENTATIVE. IF DIRECTED BY OWNER'S REPRESENTATIVE, IT SHALL BE REMOVED OFFSITE TO AN APPROPRIATE FACILITY FOR FUTURE USE AS DIRECTED BY OWNER.
- ALL EXCESS SOILS, BOULDERS, STUMPS AND OTHER MATERIALS SHALL BE DISCARDED OFFSITE IN AN ACCEPTABLE MANNER TO ALL STATE, AND MUNICIPAL REGULATIONS. ALL MATERIALS THAT ARE REMOVED AND DISPOSED SHALL BE DONE SO IN A LEGAL MANNER AND FOLLOW THE SOIL EROSION CONTROL PLAN AT OWNER'S DIRECTION.
- CONTRACTOR TO PERFORM DAILY HOUSEKEEPING ON-SITE. CONTRACTOR SHALL SWEEP DAILY ANY TRACKING ONTO EXISTING PARKING AREA TO PREVENT FROM ENTERING THE DRAINAGE SYSTEM.
- ALL ITEMS NOT INDICATED FOR REMOVAL AND DISPOSAL SHALL BE PROTECTED BY CONTRACTOR DURING CONSTRUCTION. SHOULD DAMAGE OCCUR AS A RESULT OF CONSTRUCTION PROCEDURES, CONTRACTOR SHALL REPAIR SUCH DAMAGE AT HIS OR HER OWN EXPENSE. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE AND THE MUNICIPALITY IN WHICH WORK IS BEING PERFORMED PRIOR TO START OF ANY WORK.
- URBAN COASTAL GREENWAY PUBLIC ACCESS SURFACING:**
 - PERVIOUS PAVEMENT OVERLOOK SURFACING: PROMENADE SURFACING SHALL BE CONSTRUCTED OF ADA COMPLIANT, PRECAST CONCRETE PERVIOUS PAVERS SIMILAR TO UNIFORM COLOR PROMENADE, 5' X 10' SIZE, COLOR: GRANITE, OR APPROVED EQUAL. SET PAVERS IN PERMEABLE APPLICATION - RUNNING BOND PATTERN (INSTALLED IN ACCORDANCE WITH PAVEMENT MANUFACTURER'S SPECIFICATIONS). SET PAVERS ON COMPACTED BASE OF 2" MIN. DEPTH ASTM No. 2 OPEN GRADED WASHED, CRUSHED STONE RESERVOIR COURSE, 4" MIN. DEPTH ASTM No. 57 WASHED, CRUSHED STONE BASE, AND 1.5"-2" DEPTH ASTM No. 8 WASHED, CRUSHED STONE SETTING BED. INFILL OPENINGS WITH ASTM No. 9 AGGREGATE WASHED, CRUSHED STONE (OR AS PER MANUFACTURER'S SPECIFICATIONS).
 - ALL EDGING PAVERS SHALL BE MORTARED IN PLACE. PROVIDE 2' X 2' MOCK-UP OF PAVEMENT PATTERN FOR APPROVAL BY OWNER'S REPRESENTATIVE.
 - STONEDUST PUBLIC ACCESS PATHS: TO BE COMPRISED OF 6" MIN. DEPTH COMPACTED PROCESSED GRAVEL BASE MATERIAL FINISHED WITH 2" OF COMPACTED STONEDUST.
 - CONCRETE PEDESTRIAN SURFACE AND PADS AT SITE FURNISHINGS: CONCRETE SURFACING SHALL BE COMPRISED OF 4" DEPTH CEMENT CONCRETE PEDESTRIAN SURFACING IN ACCORDANCE WITH RIDOT STD. SPECIFICATIONS. CONCRETE SURFACING SHALL BE INSTALLED OVER A 4" MIN. DEPTH COMPACTED PROCESSED GRAVEL BASE. SEE DETAIL.
 - SCULPTURES: FINAL DESIGN OF SCULPTURES TO BE DETERMINED. ALL SCULPTURES TO BE SET ON 12" MIN. THICKNESS REINFORCED CONCRETE PAD SURFACING (CONCRETE SURFACE TO BE IN ACCORDANCE WITH RIDOT STANDARDS, BROOM FINISH). FINAL SIZE AND LOCATION OF CONCRETE PAD TO BE AS NEEDED FOR SELECTED SCULPTURES.
 - PLANTINGS: SEE LANDSCAPE PLAN FOR DETAILS. FINAL PLANTINGS MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN CONFORMANCE WITH THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AS AMENDED. SEE LANDSCAPE NOTES FOR SPECIFICATIONS ON ALL PROPOSED PLANTINGS.
 - SIGNAGE:**
 - ENTRY SIGNAGE: SEE DETAILS FOR ARCHITECTURAL CONCEPT. FINAL LOGO, FONT, FINISH, ETC., ARE TO BE DETERMINED.
 - URBAN COASTAL GREENWAY SIGNAGE: PROVIDE CLEAR AND UNDERSTANDABLE SIGNS IN ACCORDANCE WITH THE REQUIREMENTS OF THE RI COASTAL RESOURCES MANAGEMENT (CRMC) URBAN COASTAL GREENWAY DESIGN MANUAL FOR THE METRO BAY REGION. THIS SIGNAGE SHOULD BE POSTED IN PUBLIC ACCESS AND PARKING AREAS.
 - INTERPRETIVE SIGNAGE PANELS: TO BE GENERALLY LOCATED AS INDICATED ON LANDSCAPE MASTER PLANS. FINAL CONTENT AND SIGN DESIGN ARE TO BE DETERMINED.

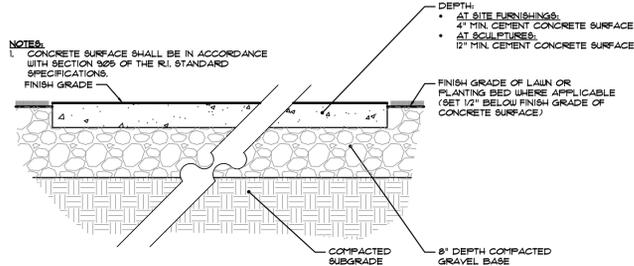
LANDSCAPE NOTES:

- THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS, AND SHALL OBTAIN ALL NECESSARY PERMITS FOR THE PROJECT.
- THE CONTRACTOR SHALL INSTALL ALL PLANT MATERIAL IN CONFORMANCE WITH THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AND THE CURRENT PLANTING PROCEDURES ESTABLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION, FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL PLANT MATERIAL SHALL MEET THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN) STANDARDS FOR NURSERY STOCK, LATEST EDITION, AND ITS AMENDMENTS. PLANT ONLY DURING SEASONS NORMAL TO THE PARTICULAR VARIETY.
- ALL PLANTINGS SHALL BE SIZED IN ACCORDANCE WITH THE SIZES INDICATED ON THE PLANT SCHEDULE, UNLESS OTHERWISE APPROVED BY OWNER'S REPRESENTATIVE.
 - SPECIFIED PLANT VARIETIES, QUANTITIES, AND SIZES ARE SUBJECT TO AVAILABILITY AT TIME OF ORDERING AND INSTALLATION. ALL PLANT SUBSTITUTIONS AND/OR CHANGES IN PLANT LOCATION OR SIZE MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE SITE CLEAN OF MISCELLANEOUS DEBRIS THROUGHOUT THE CONSTRUCTION PERIOD. ALL WASTE MATERIAL IS TO BE DISPOSED OF IMMEDIATELY TO AN OFF-SITE LOCATION, UNLESS OTHERWISE INDICATED ON THE PLANS.
- EXISTING VEGETATION PROTECTION LINE: PROTECTIVE BARRIERS ARE TO BE INSTALLED ALONG THE LIMIT OF DISTURBANCE ABUTTING EXISTING VEGETATION THAT IS NOT TO BE SUPPORTED BY THE PLANTS THAT ARE PROTECTING, BUT SHALL BE SELF-SUPPORTING. THEY SHALL BE A MINIMUM OF THREE-FOUR FEET (3'-4') HIGH AND CONSTRUCTED OF A DURABLE MATERIAL, SUCH AS SNOW OR SILT FENCE, THAT WILL LAST UNTIL CONSTRUCTION IS COMPLETED. PRUNING OF ANY DAMAGED ROOTS SHALL BE DONE IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, UTILIZING ONLY CLEAN SHARP TOOLS - NO AXES TO BE USED FOR PRUNING. CARE SHALL BE TAKEN NOT TO DISPOSE OF PAINT OR ANY OTHER SOLVENTS THAT MAY CHANGE THE SOIL STRUCTURE IN OR AROUND THE ROOTZONE OF VEGETATION SPECIFIED TO REMAIN.
- ANY ACCIDENTALLY DAMAGED ROOTS SHALL BE PRUNED BY A LICENSED ARBORIST.
- ANY ACCIDENTAL DISTRIBUTION OF NON-VEGETATIVE DEBRIS, LIQUID, OR REFUSE WITHIN OR AROUND THE ROOT PROTECTION ZONE OF VEGETATION TO REMAIN SHALL BE IMMEDIATELY CLEANED AND REMOVED FROM SITE LEGALLY AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS TO PREVENT CHANGES TO THE SOIL STRUCTURE OR NATURAL ENVIRONMENT OF PROTECTED VEGETATION.
- MAINTENANCE AND WARRANTY:**
 - ALL PLANTINGS SHALL BE MAINTAINED BY THE OWNER OR CONTRACTOR FROM THE TIME OF PLANTING UNTIL THE PLANTINGS ARE ESTABLISHED. MAINTENANCE DURING THIS PERIOD SHALL INCLUDE WATERING OF PLANTINGS AS NECESSARY TO ENSURE PROPER ESTABLISHMENT OF PLANTINGS.
 - CONTRACTOR SHALL PROVIDE A ONE (1) YEAR WARRANTY ON ALL NEW PLANTINGS. SHOULD NEW PLANT MATERIAL DIE (OR DECLINE TO THE POINT WHERE PLANT IS EXPECTED TO DIE) WITHIN THIS WARRANTY PERIOD (OTHER THAN DUE TO NATURAL FACTORS, NATURAL DISASTER, OR NEGLIGENCE), CONTRACTOR SHALL REMOVE THE PLANT AND REPLACE SAID PLANT MATERIAL WITH NEW PLANTINGS IN ACCORDANCE WITH THE SIZE AND VARIETY SPECIFIED. ALL REPLACEMENT PLANT MATERIAL SHALL CARRY A NEW ONE (1) YEAR WARRANTY STARTING FROM THE DATE OF REPLACEMENT. CONTRACTOR SHALL REMOVE ALL STAKES, GUY WIRES, AND TAPE FROM TREES AT THE END OF THE SPECIFIED WARRANTY PERIOD.
 - FINAL LOCATIONS OF ALL NEW PLANTINGS SHALL BE ADJUSTED AS NECESSARY BASED ON FINAL AS-BUILT LOCATIONS OF ALL NEW AND EXISTING UTILITIES AND OTHER SITE IMPROVEMENTS.
 - ON-SITE TOPSOIL: NO REMOVAL OF TOPSOIL OR UNNECESSARY GRADING/DISTURBANCE OF THE SITE SHALL OCCUR DURING CONSTRUCTION UNLESS NECESSARY FOR SUCCESSFUL IMPLEMENTATION OF IMPROVEMENTS. TOPSOIL THAT MUST BE MOVED DURING CONSTRUCTION PROCEDURES AND/OR GRADING NECESSARY FOR CONSTRUCTION, SHALL BE REMOVED AND STOCKPILED ON-SITE FOR RE-USE. DO NOT MIX TOPSOIL WITH SUBSOIL. PROTECT ALL STOCKPILES FROM EROSION AND SEDIMENTATION WITH APPROPRIATE SOIL EROSION AND SEDIMENTATION CONTROL IN CONFORMANCE WITH THE ENGINEER'S PLANS (SEE REFERENCES).
 - PLANTABLE SOIL: ALL LOAM USED AS PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LIMBS OF SOIL, TREE LIMBS, TRASH, CONSTRUCTION DEBRIS, OR OTHER OBJECTIONABLE MATERIAL. NEW PLANTING BEDS SHALL BE AMENDED WITH WELL-AGED COMPOST. LOAM SHALL BE AMENDED WITH COMPOST AS NEEDED TO PRODUCE A PLANTABLE SOIL CONTAINING A MINIMUM OF 20% ORGANIC MATTER. ON-SITE NATIVE LOAM MAY BE UTILIZED FOR PLANTABLE SOIL, BUT SHALL BE AMENDED, SCREENED, AND/OR RAKED AS NECESSARY TO CONFORM TO THE REQUIREMENTS OF ANY OFF-SITE LOAM.
 - COMPOST SHALL BE A WELL DECOMPOSED, STABLE, WEED FREE ORGANIC MATTER SOURCE. IT SHALL BE DERIVED FROM AGRICULTURAL, FOOD, AND/OR YARD TRIMMINGS. THE PRODUCT SHALL CONTAIN NO SUBSTANCES TOXIC TO PLANTS AND SHALL BE REASONABLY FEE (LESS THAN 1 PERCENT BY DRY WEIGHT) OF MAN-MADE FOREIGN MATTER.
 - WATERING: THOROUGHLY WATER ALL PLANTS WHEN 2/3 OF BACKFILL HAS BEEN PLACED TO ENSURE ALL AIR POCKETS ARE REMOVED. FIRMLY TAMP SOIL AROUND PLANT. ENSURE PROPER WATERING OF PLANT MATERIAL UNTIL ESTABLISHMENT (ONCE PER DAY FOR 14 DAYS FOLLOWING INSTALLATION, OR AS NEEDED DEPENDING ON FREQUENCY AND QUANTITY OF NATURAL RAIN FALL). MONITOR SOIL MOISTURE WITHIN ROOTZONE OF PLANTINGS PRIOR TO AND FOLLOWING EACH WATERING PROCEDURE. DO NOT OVERWATER OR SATURATE ROOTZONE OF PLANTINGS FOR PROLONGED PERIOD OF TIME.
 - PRUNING: ALL PLANTING MATERIAL SHALL BE PRUNED IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, AND IN SUCH A MANNER AS TO MAINTAIN THE NATURAL FORM OF THE PLANT. PRUNING SHALL BE COMPLETED UTILIZING ONLY CLEAN SHARP TOOLS. USE OF AXES FOR PRUNING IS UNACCEPTABLE.
 - PRUNE ALL PLANT MATERIAL TO REMOVE ANY AND ALL DEADWOOD AND CROSSING BRANCHES.
 - MULCH: ALL PLANTINGS SHALL BE MULCHED AS INDICATED ON DETAIL DRAWINGS. PLANTINGS INSTALLED IN CLUSTERS, OR WITHIN PLANTING BEDS SHALL BE MULCHED AS SUCH, INSTALLING MULCH THROUGHOUT THE ENTIRE PLANTING BED. MULCH TO BE 3"-4", OR AS OTHERWISE NOTED, IN DEPTH AND REDUCED TO LESS THAN 1" AT ROOT FLARE OF EACH PLANT.
 - BARK MULCH, WHERE INDICATED, SHALL BE WELL-AGED, SHREDED BARK MULCH, NATURAL DARK BROWN IN COLOR AND NON-DYED, OR AS APPROVED BY OWNER'S REPRESENTATIVE.
 - LOAM AND SEED:**
 - LOAM AND SEED ALL DISTURBED AREAS. ALL NEW LAWN AREAS SUBJECT TO EROSION SHALL BE STABILIZED UTILIZING LITE MESH OR APPROVED EQUAL.
 - LOAM UTILIZED OR RETAINED FOR LAWN AREAS SHALL BE SANDY LOAM, CONTAINING A MINIMUM OF 5% ORGANIC MATTER, 6" IN DEPTH, AND CONFORMING TO THE REQUIREMENTS OF THE USDA FOR LAWN PLANTINGS. ON-SITE NATIVE LOAM MAY BE UTILIZED FOR LAWN AREAS, BUT SHALL BE AMENDED, SCREENED, AND/OR RAKED AS NECESSARY TO CONFORM TO THE REQUIREMENTS OF ANY OFF-SITE LOAM.
 - IF INSTALLING SEED UTILIZING HYDROSEEDER DEVICE, PROVIDE FIBER MULCH & FERTILIZER MIX.
 - IF BROADCAST SEEDING, TOPDRESS W/ 2" STRAW MULCH OR FIBER MULCH & FERTILIZER MIX (NO SEED), FOLLOWING SPREADING OF SEED.
 - SEED MIXES:**
 - SEED MIX UTILIZED FOR LAWN AREAS SHALL BE SIMILAR TO "Endophyte Enhanced Mix" AS AVAILABLE THROUGH ALLEN'S SEED. EXETER, RI, OR EQUAL DROUGHT TOLERANT, DEEP-ROOTING GRASS SEED, CONTAINING A MINIMUM OF 30% BY WEIGHT OF TURF-TYPE TALL FESCUE.
 - SEED MIX UTILIZED FOR COASTAL MEADOW GRASSES AREAS SHALL BE SIMILAR TO RI STATE NATIVE MIX, AS AVAILABLE THROUGH ALLEN'S SEED, EXETER, RI, OR APPROVED EQUAL COMPRISED OF THE FOLLOWING:
 - 30% Hard Fescue
 - 25% Perennial Rye
 - 25% Little Bluestem
 - 20% Switchgrass



- NOTES:**
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WATER QUALITY TREATMENT REQUIREMENTS OF STANDARD 3, OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, PREPARED BY RIDEM AND RIRCMC.
 - CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS FOR PERVIOUS INTERLOCKING CONCRETE PAVERS.

1 PVIOUS CONCRETE PAVER SURFACE NOT TO SCALE

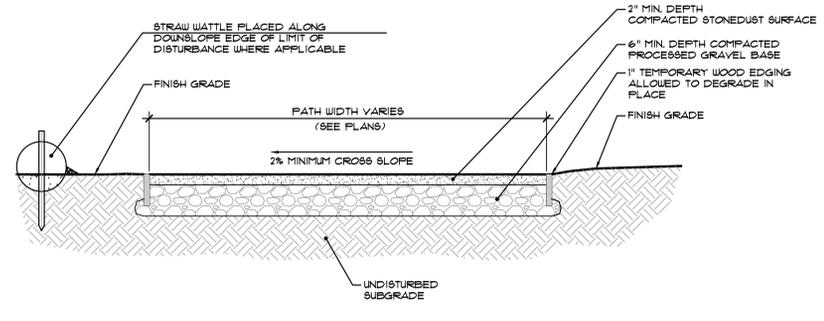


- CONCRETE SURFACE JOINTS:**
- EXPANSION JOINTS AND CONSTRUCTION JOINTS SHALL BE FORMED AROUND ALL APPURTENANCES SUCH AS MANHOLES, UTILITY POLES, ETC. EXTENDING INTO AND THROUGH THE SIDEWALK. PREMOULDED EXPANSION JOINT FILLER 1/4-INCH THICK SHALL BE INSTALLED IN THESE JOINTS. EXPANSION JOINTS SHALL BE PLACED EVERY 20 FEET.
 - CONCRETE SURFACES SHALL BE DIVIDED INTO SECTIONS BY DUMP JOINTS FORMED BY A JOINTING TOOL OR OTHER ACCEPTABLE MEANS AS DIRECTED. THESE DUMP JOINTS SHALL EXTEND INTO THE CONCRETE FOR AT LEAST 1/3 OF THE DEPTH AND SHALL BE APPROXIMATELY 1/8-INCH WIDE AT NO TIME SHALL THE DISTANCE BETWEEN TRANSVERSE AND/OR LONGITUDINAL DUMP JOINTS EXCEED 9 FEET.
 - THE FORGING OF PREMOULDED EXPANSION JOINT FILLER INTO FRESHLY PLACED CONCRETE WILL NOT BE ALLOWED.
 - EXPANSION JOINT FILLER SHALL BE INSTALLED BETWEEN CONCRETE SURFACE AND ANY FIXED, SMOOTH STRUCTURE. THIS EXPANSION JOINT MATERIAL SHALL EXTEND FOR THE FULL DEPTH OF THE SURFACE, IF THE SURFACE ABUTS AN IRREGULAR WALL, FOUNDATION OR STATUARY OBJECT, THE EXPANSION JOINT FILLER SHALL BE PLACED 4 INCHES FROM THE IRREGULAR SURFACE AND CONCRETE PLACED BETWEEN THE IRREGULAR SURFACE AND THE EXPANSION JOINT MATERIAL. THE MAXIMUM DISTANCE BETWEEN TRANSVERSE AND/OR LONGITUDINAL EXPANSION JOINTS SHALL NOT EXCEED 20 FEET.

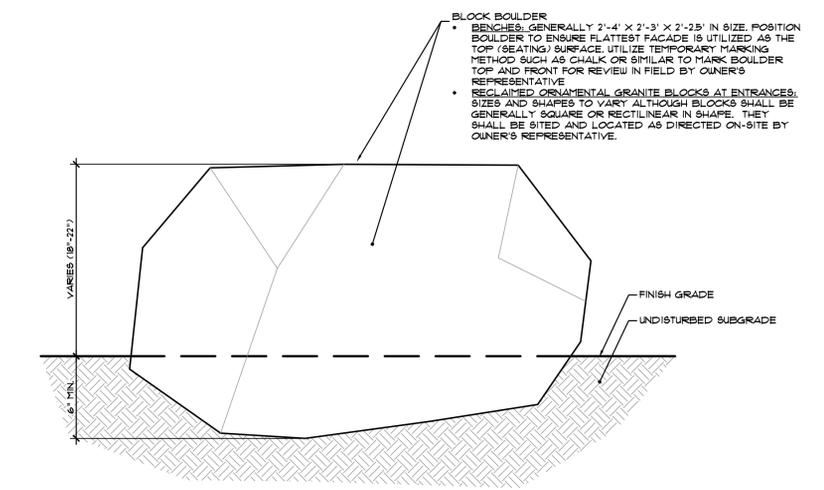
3 CONCRETE PAD SURFACE AT SITE FURNISHINGS AND SCULPTURES NOT TO SCALE

SHORELINE BUFFER MANAGEMENT NOTES (Invasive Plant Management):

- ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
- ALL PROPOSED MANAGEMENT PROCEDURES ARE TO BE COMPLETED BY AND/OR OVERSEEN BY A CERTIFIED INVASIVE MANAGER (IM) CERTIFIED THROUGH THE RI COASTAL RESOURCES MANAGEMENT COUNCIL INVASIVE PLANT MANAGEMENT PROGRAM.
- CHEMICAL TREATMENT AND CONTROL OF INVASIVE SPECIES:**
 - INVASIVE SPECIES ONLY SHALL BE TREATED WITH HERBICIDE CHEMICAL TREATMENT IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS, AND IN STRICT CONFORMANCE WITH HERBICIDE MANUFACTURER'S SPECIFICATIONS FOR APPLICATION. A CERTIFIED INVASIVE MANAGER (IM) WILL WORK WITH THE CONTRACTED COMPANY TO CONFIRM ONLY TARGETED SPECIES WITHIN THE LIMIT OF WORK WILL BE TREATED/MANAGED. SEE EXISTING LANDSCAPE CONDITIONS DIAGRAM.
 - ONLY RI STATE CERTIFIED /LICENSED LANDSCAPE PROFESSIONALS SHALL BE ALLOWED TO UTILIZE CHEMICAL HERBICIDES.
 - ONLY WATER-SAFE FORMS OF HERBICIDES, AS DETERMINED AND ACCEPTED BY THE RI COASTAL RESOURCES MANAGEMENT COUNCIL (RIRCMC), RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM), AND US ENVIRONMENTAL PROTECTION AGENCY (EPA), US DEPARTMENT OF AGRICULTURE, OR OTHER LOCAL, STATE, OR FEDERAL AGENCIES WITH GOVERNANCE OVER THIS PROJECT AREA SHALL BE UTILIZED IN CHEMICAL TREATMENT AND CONTROL OF INVASIVE SPECIES.
 - CUT-STEM (STUMP) TREATMENT:**
 - PREFERRED METHOD OF CONTROL FOR WOODY OR BAMBOO-LIKE INVASIVE SPECIES SUCH AS ASIATIC BITTERWEED, AUTUMN OLIVE, JAPANESE HONEYSUCKLE, JAPANESE KNOTWEED, MULTIFLORA ROSE, PRIVET, BLACK LOCUST, ETC. REFER TO MOST RECENT RHODE ISLAND NATURAL HISTORY SURVEY (RINHS) AND RHODE ISLAND INVASIVE SPECIES COUNCIL (RISCC) LISTING OF INVASIVE PLANTS FOR PLANTS THAT ARE NOTED TO BE INVASIVE IN RHODE ISLAND.
 - IT IS UNDERSTOOD THAT INVASIVE STATUS OF PLANTS IS EVER-EVOLVING AND HABITATS OF INVASIVE SPECIES ARE CONSTANTLY IN FLUX. AS PLANTS ARE OBSERVED TO BE INVASIVE THIS LIST MAY CHANGE AND TREATMENT AND SUGGESTED CONTROL MEASURES/TECHNIQUES MAY BE ADJUSTED IN ACCORDANCE WITH THE GUIDANCE OF OF THE CRMC, RIDEM, AND RISCC.
 - PLEASE REFER TO THE URI COOPERATIVE EXTENSION INVASIVE PLANT MANAGEMENT CERTIFICATION PROGRAM AND THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES MICHIGAN NATURAL FEATURES INVENTORY, 2012, AS AMENDED, "INVASIVE SPECIES - BEST CONTROL PRACTICES" MANAGEMENT FACT SHEETS FOR ADDITIONAL GUIDANCE ON INVASIVE CONTROL TECHNIQUES.
 - CUT-STEM (STUMP) CHEMICAL TREATMENT: THIS MAY BE USED IN ANY SEASON EXCEPT DURING PERIODS OF HEAVY SAP FLOW IN THE SPRING. REFER TO HERBICIDE LABEL FOR SPECIFIC DETAILS. UTILIZE DYES, WHERE POSSIBLE TO HELP KEEP TRACK OF WHICH STEMS HAVE BEEN TREATED.
 - CUT STEMS APPROXIMATELY 4" ABOVE THE UNDERLYING GROUND SURFACE, AND PAINT STUMPS WITH CONCENTRATED HERBICIDE USING A SMALL SPRAY BOTTLE OR WICKING APPLICATOR, APPLY TO CUT SURFACE UP TO THE EDGES AND JUST AROUND THE SIDES OF THE CUT STEM. ON LARGER STEMS ONLY APPLY HERBICIDE TO THE OUTER EDGES OF THE STEM, NEAR THE CAMBIUM UNDER THE OUTER BARK.
 - MONITOR TREATED PLANTS FOLLOWING ONE-YEAR FOR ANY RESPROUTING. TREAT NEW STEMS AS NEEDED IN ACCORDANCE WITH MANUFACTURERS' LABEL FOR SPECIFICATIONS ON RE-APPLICATION.
 - FOLIAR SPRAY TREATMENT:**
 - PREFERRED METHOD OF CONTROL FOR HERBACEOUS OR GRASS-LIKE INVASIVE SPECIES SUCH AS PHRAGMITES, AND BLACK SWALLOWWORT, ETC. REFER TO MOST RECENT RHODE ISLAND NATURAL HISTORY SURVEY (RINHS) AND RHODE ISLAND INVASIVE SPECIES COUNCIL (RISCC) LISTING OF INVASIVE PLANTS FOR PLANTS THAT ARE NOTED TO BE INVASIVE IN RHODE ISLAND.
 - IT IS UNDERSTOOD THAT INVASIVE STATUS OF PLANTS IS EVER-EVOLVING AND HABITATS OF INVASIVE SPECIES ARE CONSTANTLY IN FLUX. AS PLANTS ARE OBSERVED TO BE INVASIVE THIS LIST MAY CHANGE AND TREATMENT AND SUGGESTED CONTROL MEASURES/TECHNIQUES MAY BE ADJUSTED IN ACCORDANCE WITH THE GUIDANCE OF OF THE CRMC, RIDEM, AND RISCC.
 - PLEASE REFER TO THE URI COOPERATIVE EXTENSION INVASIVE PLANT MANAGEMENT CERTIFICATION PROGRAM AND THE US DEPARTMENT OF THE INTERIOR GUIDANCE ON THE CONTROL AND MANAGEMENT OF INVASIVE PHRAGMITES (INVASIVES.ORG), AS AMENDED, FOR ADDITIONAL GUIDANCE ON INVASIVE CONTROL TECHNIQUES.
 - FOLIAR SPRAY CHEMICAL CONTROL TREATMENT:** THIS SHOULD BE DONE IN LATE SUMMER AFTER PLANTS ARE IN FULL BLOOM UP TO THE FIRST KILLING FROST.
 - SPRAY PLANTS WITH USE OF A BACKPACK SPRAYER OR EQUAL CLOSE TO THE LEAVES USING LOW PRESSURE.
 - DO NOT UTILIZE SPRAY APPLICATIONS DURING WINDY PERIODS, AND WHEN WIND IS A CONCERN. FOLLOW MANUFACTURER'S APPLICATION SPECIFICATIONS AND LABELING.
 - WAIT TWO WEEKS TO ALLOW PLANT EXPOSURE TO THE HERBICIDE. REAPPLY IF NEEDED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 - MONITOR TREATED PLANTS FOLLOWING ONE-YEAR FOR ANY RESPROUTING. TREAT NEW STEMS AS NEEDED IN ACCORDANCE WITH MANUFACTURERS' LABEL FOR SPECIFICATIONS ON RE-APPLICATION.

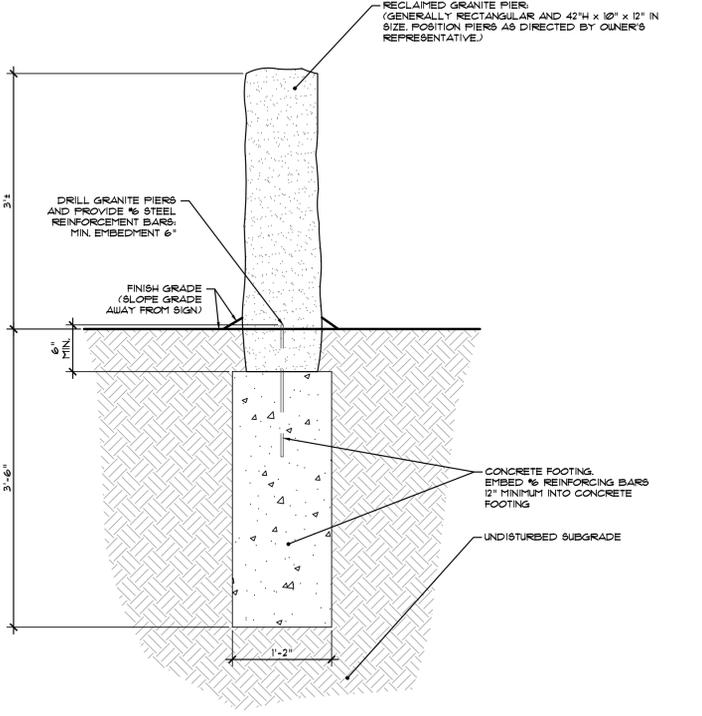


2 STONEDUST PUBLIC ACCESS PATH NOT TO SCALE



- NOTE:** BLOCK BOULDERS TO BE REVIEWED WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. FINAL ORIENTATION AND LOCATION OF BOULDER TO BE AS DIRECTED ON-SITE BY OWNER'S REPRESENTATIVE.

4 RECLAIMED GRANITE BLOCK AND BLOCK BENCH PLACEMENT DETAIL NOT TO SCALE



5 GRANITE PIERS AT PUBLIC ACCESS POINTS NOT TO SCALE

REVISION HISTORY:

DATE	REVISION
6/21/21	Site Layout, Grading, and Lighting Locations and Adjusted Plantings
2/23/22	Revised per CRMC Comments, Dated 12/21/21

REFERENCES:

- Plan Entitled: "East Point"; MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE, RHODE ISLAND: GRADING AND DRAINAGE (COASTAL SIDE); Drawing Number C-10, Sheet 10 of 23; Client/Owner: Noble Development, LLC; As Prepared by: Northeast Engineers and Consultants, Inc.; Dated: 17APR21, as amended; Scale: 1"=50'
- Plan Entitled: "East Point"; MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE, RHODE ISLAND: GRADING AND DRAINAGE (POND SIDE); Drawing Number C-11, Sheet 11 of 23; Client/Owner: Noble Development, LLC; As Prepared by: Northeast Engineers and Consultants, Inc.; Dated: 17APR21, as amended; Scale: 1"=50'

East Point



Map 203, Block 1, Lot 4 &
Map 303, Block 13, Lots 4 & 5
Roger Williams Avenue
East Providence, RI

Owner/Prepared For:
Nobel Development, LLC
10 Green Street
Providence, RI 02903



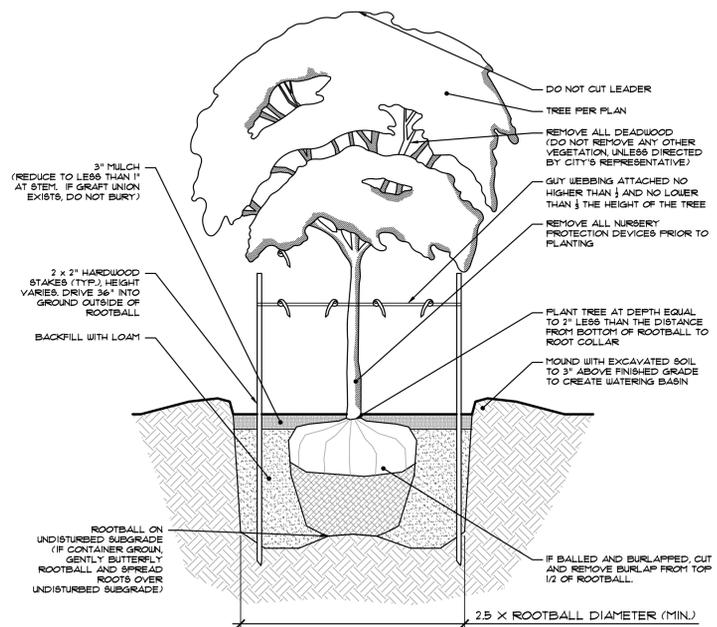
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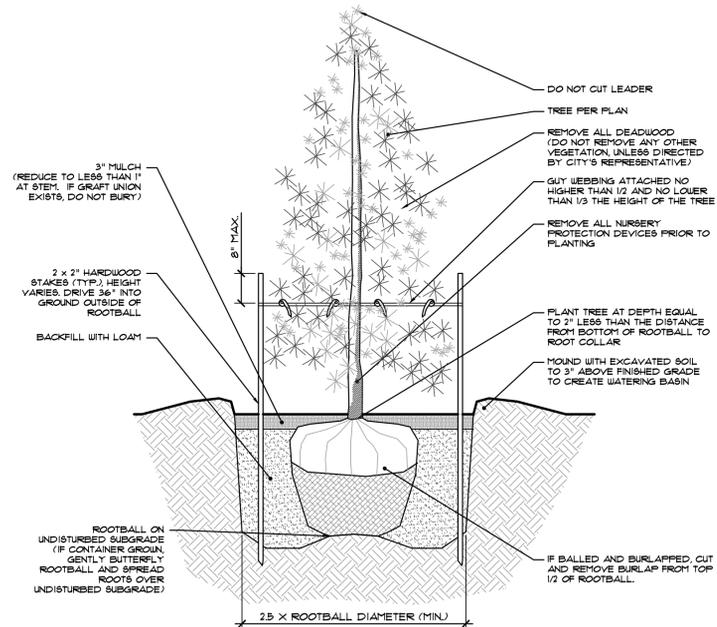
LANDSCAPE PLANTING ONLY

Landscape Notes and Details 1

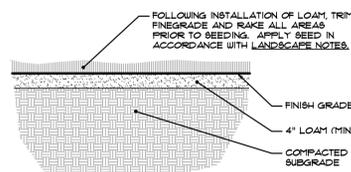
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Date: April 22, 2021	ISSUED FOR PERMITTING



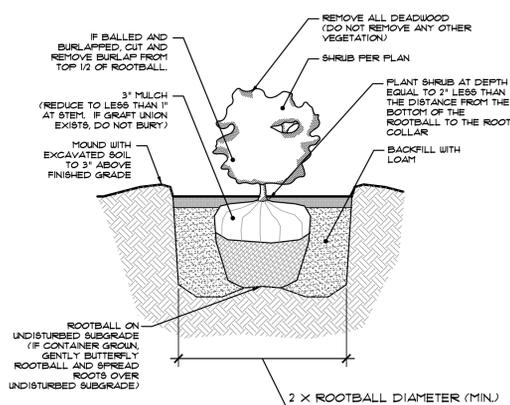
1 TREE PLANTING DETAIL NOT TO SCALE



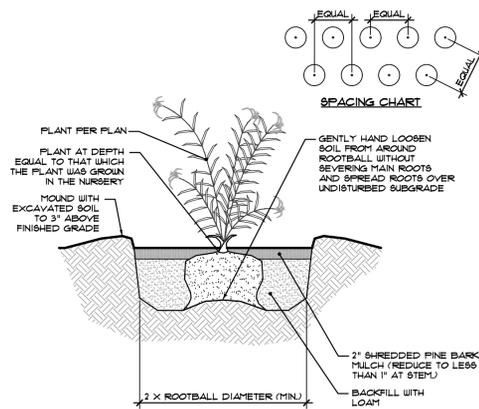
2 EVERGREEN PLANTING DETAIL NOT TO SCALE



3 LOAM AND SEED NOT TO SCALE



4 SHRUB PLANTING DETAIL NOT TO SCALE



5 PERENNIAL/GROUND COVER PLANTING DETAIL NOT TO SCALE

REVISION HISTORY:

DATE	REVISION
6/21/21	Site Layout, Grading, and Lighting Locations and Adjusted Plantings
2/23/22	Revised per CRMC Comments, Dated 12/21/21

REFERENCES:

East Point

RECEIVED
MARCH 1, 2022
COASTAL RESOURCES MANAGEMENT COUNCIL

Map 203, Block 1, Lot 4 &
Map 303, Block 13, Lots 4 & 5
Roger Williams Avenue
East Providence, RI

Owner/Prepared For:
Nobel Development, LLC
10 Green Street
Providence, RI 02903

KMA

Kevin M. Alverson
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360 Annaquatucket Road 401-338-0044
Wickford, RI 02852 KevinMAlversonLA.com



Landscape Notes and Details 2

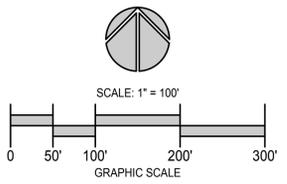
Project #: 2.291.316	Sheet 5 of 8
Scale: As Shown	L-5
Drawn By: KMA	
Checked By: KMA	
Date: April 22, 2021	ISSUED FOR PERMITTING

EXISTING PLANT COMMUNITIES LEGEND

- A** PLANT COMMUNITY A:
(New Growth Mixed Transitional Disturbed Urban Condition):
Oak and Maple Saplings (*Quercus sp.* and *Acer sp.*), Less than 3" Cal.
Sparse Herbaceous Undergrowth (Goldenrod (*Solidago sp.*), Switchgrass (*Panicum sp.*), Little Bluestem (*Schizochyrium scoparium*))
Scrub Brush and Invasive Understory (Sweetgale (*Myrica gale*), Japanese Knotweed (*Fallopia japonica* (*Polygonum cuspidatum*)), Tree of Heaven (*Ailanthus altissima*))
- B** PLANT COMMUNITY B:
(New Growth Mixed Transitional Disturbed Urban Condition):
Birch, Oak and Maple Saplings (*Betula populifolia*, *Quercus sp.* and *Acer sp.*), Less than 6" Cal.
Sparse Herbaceous Undergrowth (Goldenrod (*Solidago sp.*), Switchgrass (*Panicum sp.*), Little Bluestem (*Schizochyrium scoparium*))
- C** PLANT COMMUNITY C:
(Moderate Growth Transitional Sloped Edge Woodland):
Oak, Maple, and Locust Trees with Mixed Understory (*Quercus sp.*, *Acer sp.*, and *Robinia pseudoacacia*), 6"-18" DBH

- D** PLANT COMMUNITY D:
(Cleared Condition with Trash/Debris and Invasive Volunteer Plant Material):
Oriental Bittersweet (*Celastrus orbiculatus*), Tree of Heaven (*Ailanthus altissima*)
- E** PLANT COMMUNITY E:
(Cleared Condition with Scrub and Invasive Shrubs/Vines):
Light Winterberry (*Ilex verticillata*) with Invasive Plant Growth Interspersed (Oriental Bittersweet (*Celastrus orbiculatus*), Tree of Heaven (*Ailanthus altissima*))
- F** PLANT COMMUNITY F:
(Cleared Condition with Sapling Pioneer Species):
Sumac (*Rhus typhina*) and Birch (*Betula populifolia*), Less than 4" Cal.
- G** PLANT COMMUNITY G:
(Cleared Condition with Native Grasses and Volunteer Scrub Brush):
Switchgrass (*Panicum sp.*), Little Bluestem (High-Tide Bush (*Iva frutescens*) and Sweetgale (*Myrica gale*)) Interspersed with Invasive Shrubbery (Tree of Heaven (*Ailanthus altissima*))

- H** PLANT COMMUNITY H:
(Cleared Condition with Native Grasses):
Switchgrass (*Panicum sp.*) and Little Bluestem (*Schizochyrium scoparium*) Interspersed with some Invasive Plant Materials (Tree of Heaven (*Ailanthus altissima*))
- I** PLANT COMMUNITY I:
(New Growth Mixed Wooded Succession/Transitional Disturbed Urban Condition):
Norway Maple Volunteers and Saplings (*Acer platanoides*), 4"-12" Cal./DBH
Oak Volunteers and Saplings (*Quercus sp.*), 2"-16" Cal./DBH
Black Locust Saplings (*Robinia pseudoacacia*), 1"-10" Cal./DBH
Birch and Sumac Saplings (*Betula populifolia* and *Rhus typhina*), Less than 3" Cal.
Scrub Brush and Invasive Understory (Japanese Knotweed (*Fallopia japonica* (*Polygonum cuspidatum*)), Black Locust (*Robinia pseudoacacia*), Wild Rose (*Rosa multiflora*), Oriental Bittersweet (*Celastrus orbiculatus*))



DATE	REVISION
2/23/22	Revised per CRMC Comments, Dated 12/21/21

- REFERENCES:**
- Aerial Photography courtesy of GoogleEarthPro, Imagery Date: 6/26/18
 - Site Observations made by Kevin M. Alverson, LA on 12/15/20

East Point



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LANDSCAPE PLANTING ONLY

Existing Vegetation Diagram

Project #: 2.291.316	Sheet 6 of 8
Scale: 1" = 100'	L-6
Drawn By: KMA	
Checked By: KMA	
Date: February 23, 2022	ISSUED FOR PERMITTING



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING ACCESS ROAD AREA

(EXISTING PAVED ACCESS ROAD FROM ROGER WILLIAMS AVENUE AS VIEWED FROM THE EAST)



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING VEGETATION ALONG OMEGA POND

(EXISTING VEGETATION ALONG POND EDGE OF POND SIDE OF SITE AS VIEWED FROM THE NORTHWEST)



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING SOUTHERN COASTLINE, COASTAL SIDE: VIEW 2

(EXISTING VEGETATION AT THE COASTAL FEATURE OF THE SEEKONK RIVER AS VIEWED FROM THE EAST)



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING RAILROAD CROSSING AREA

(EXISTING PAVED ACCESS ROAD FROM ROGER WILLIAMS AVENUE AS VIEWED FROM THE EAST)



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING VEGETATION AT THE OMEGA POND DAM

(EXISTING VEGETATION AT COASTAL SIDE OF PROJECT SITE AT THE DAM AS VIEWED FROM THE NORTHWEST)



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING SOUTHWEST POINT, COASTAL SIDE

(EXISTING CLEARED CONDITION AT THE SOUTHWEST POINT OF THE PROJECT SITE AS VIEWED FROM THE EAST)



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING CONDITION AT PROPOSED BOAT LAUNCH

(BOAT LAUNCH AREA OF POND SIDE OF PROJECT SITE AS VIEWED FROM THE NORTH)



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING SOUTHERN COASTLINE, COASTAL SIDE: VIEW 1

(EXISTING VEGETATION AT THE COASTAL FEATURE OF THE SEEKONK RIVER AS VIEWED FROM THE NORTHEAST)



PHOTO BY KEVIN M. ALVERSON, LA

EXISTING WESTERN SHORELINE, COASTAL SIDE

(EXISTING CLEARED CONDITION ALONG THE WESTERN SHORELINE OF THE SITE, AS VIEWED FROM THE SOUTH)

REVISION HISTORY:

DATE	REVISION
2/23/22	Revised per CRMC Comments, Dated 12/21/21

REFERENCES:

1. Site Observations made by Kevin M. Alverson, LA on 12/15/20

East Point



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LANDSCAPE PLANTING ONLY

Existing Site Vegetation Photographs

Project #: 2.291.316

Sheet 7 of 8

Scale: Not to Scale

Drawn By: KMA

Checked By: KMA

Date: February 23, 2022

L-7

ISSUED FOR PERMITTING



Primary UCG Sign



Secondary UCG Sign



Parking Sign

Sign artwork by Grady Peck.

URBAN COASTAL GREENWAY SIGNAGE LEGEND

- PRIMARY SIGN: URBAN COASTAL GREENWAY ACCESS POINT
- SECONDARY SIGN: URBAN COASTAL GREENWAY WAYFINDING AND TRAIL MARKERS
- ▲ PARKING SIGN: URBAN COASTAL GREENWAY PUBLIC PARKING INDICATOR SIGNAGE

REVISION HISTORY:

DATE	REVISION
2/23/22	Revised per CRMC Comments, Dated 12/21/21

REFERENCES:

- Plan Entitled: "EAST POINT" ROGER WILLIAMS AVENUE EAST PROVIDENCE, RHODE ISLAND: PUBLIC ACCESS PLAN (COASTAL SIDE); Drawing Number PA-1; As Prepared by: Northeast Engineers and Consultants, Inc.; Dated: 22FEB22; Scale: 1"=100'
- Plan Entitled: "EAST POINT" ROGER WILLIAMS AVENUE EAST PROVIDENCE, RHODE ISLAND: PUBLIC ACCESS PLAN (POND SIDE); Drawing Number PA-2; As Prepared by: Northeast Engineers and Consultants, Inc.; Dated: 03JUN21; Scale: 1"=100'
- Document Entitled, "URBAN COASTAL GREENWAY DESIGN MANUAL FOR THE METRO BAY REGION", as Available Through the Rhode Island Coastal Resources Management Council, Stedman Government Center, 4808 Tower Hill Road, Wakefield, RI 02879, and on-line at www.crmc.ri.gov/samp

East Point



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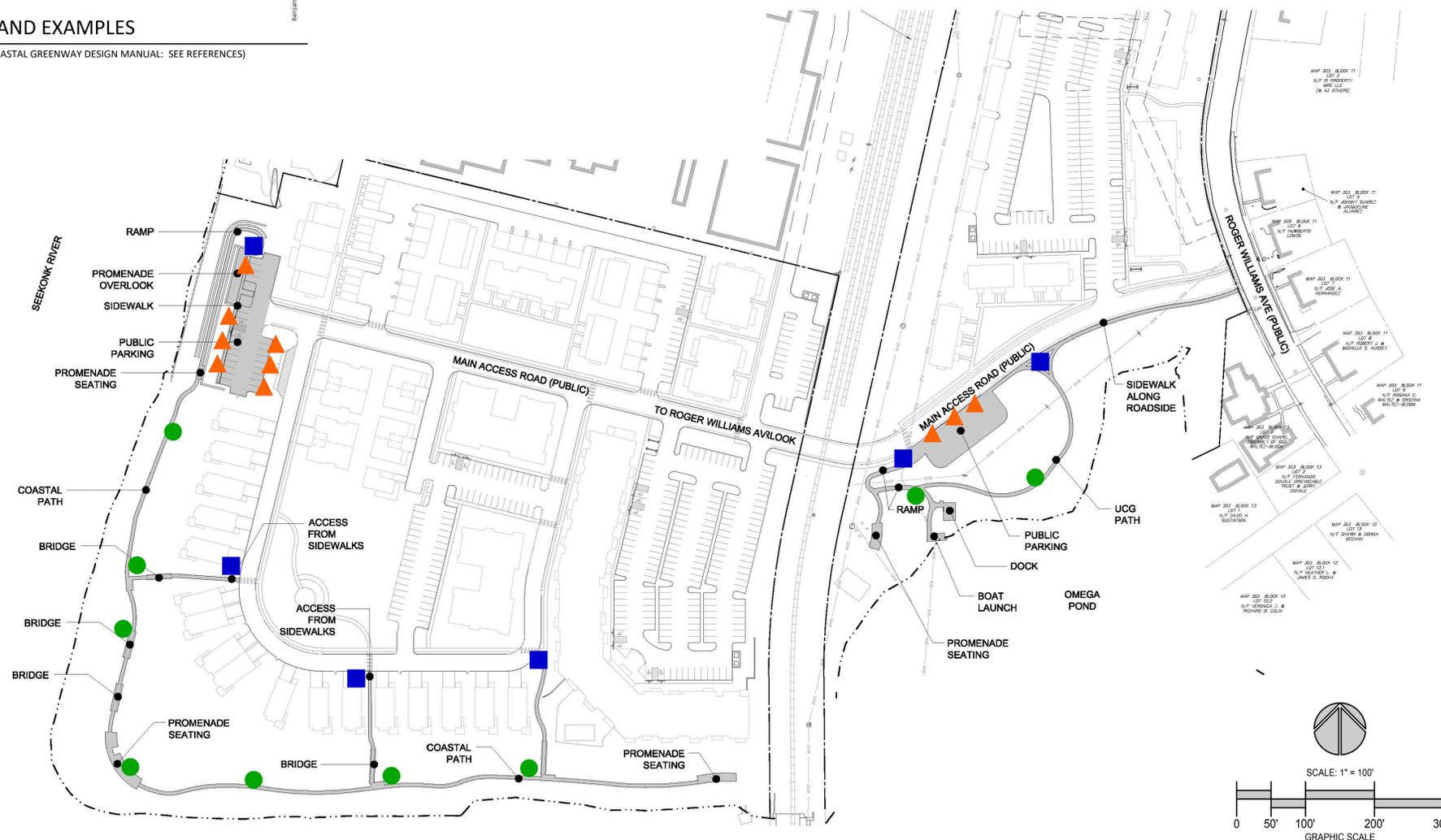
LANDSCAPE PLANTING ONLY

Urban Coastal Greenway Signage Diagram

Project #: 2.291.316	Sheet 8 of 8
Scale: 1" = 100'	L-8
Drawn By: KMA	
Checked By: KMA	
Date: February 23, 2022	ISSUED FOR PERMITTING

SIGNAGE GRAPHICS AND EXAMPLES

(AS AVAILABLE THROUGH THE URBAN COASTAL GREENWAY DESIGN MANUAL: SEE REFERENCES)

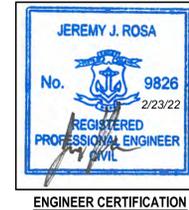


EAST POINT MULTIFAMILY DEVELOPMENT

**FORMER OCEAN STATE STEEL SITE
 MAP 203 BLOCK 1 LOT 4 AND MAP 303 BLOCK 13 LOTS 4 & 5
 ROGER WILLIAMS AVENUE AND BOURNE AVENUE
 EAST PROVIDENCE, RHODE ISLAND**

CIVIL ENGINEER: NORTHEAST ENGINEERS & CONSULTANTS, INC.

 A KNOWLEDGE CORPORATION
 6 VALLEY ROAD MIDDLETOWN RI 02842
 PHONE (401) 849-0810 FAX (401) 848-4169
 WWW.NORTHEASTENGINEERS.COM



CLIENT:
 NOBLE DEVELOPMENT, LLC
 10 GREEN STREET
 PROVIDENCE, RI 02903

LANDSCAPE ARCHITECT:
 KEVIN M. ALVERSON LANDSCAPE ARCHITECTURE
 360 ANNAQUATUCKET ROAD
 WICKFORD, RI 02852
 kma@kevinmalversonla.com

ARCHITECT:
 UNION STUDIO
 140 UNION STREET
 PROVIDENCE, RI 02903



FEBRUARY 23, 2022 PERMIT SET

PLAN INDEX

SITE/CIVIL ENGINEERING PLANS

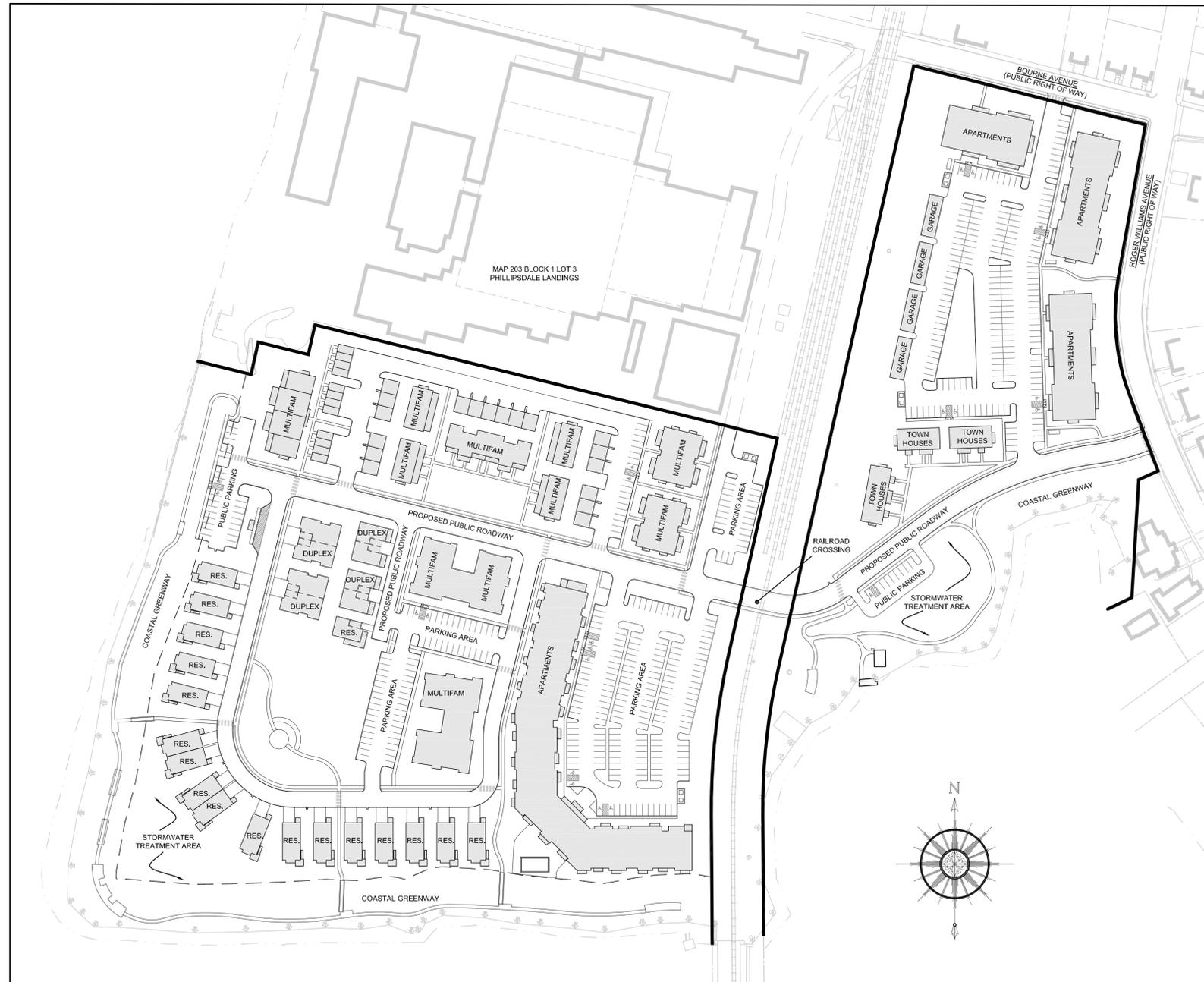
- TITLE SHEET
- NOTES
- INDEX SHEET
- EXISTING CONDITION PLANS
- PROPOSED LAYOUT PLANS
- PROPOSED UTILITY PLANS
- PROPOSED GRADING AND DRAINAGE PLANS
- PROPOSED SOIL EROSION AND SEDIMENT CONTROL PLANS
- PROPOSED ROAD PROFILES
- PROPOSED DETAILS

- SHEET 1
- SHEET 2
- SHEET 3
- SHEETS 4-5
- SHEETS 6-7
- SHEETS 8-9
- SHEETS 10-11
- SHEETS 12-13
- SHEETS 14-17
- SHEETS 18-23

ADDENDUMS

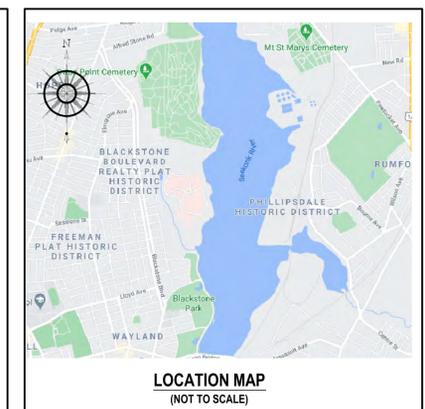
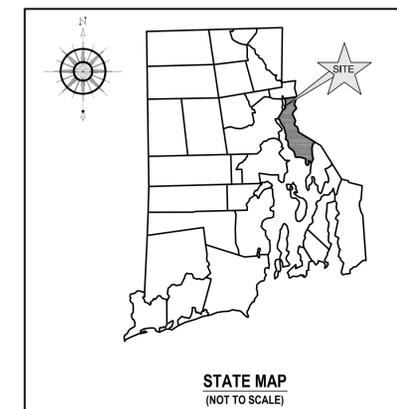
- PLAN OF LAND (BY OTHERS)
- LANDSCAPING PLANS

- SHEET 1
- SHEETS L1-L8



SITE PLAN

SCALE = 1" = 100'



SUBMISSION AND REVISION SUMMARY

AGENCY OR REVISION	DATE:	COMMENTS:
E. PROV. WATERFRONT COMMISSION	APR 23, 2021	RESPONSE TO COMMENTS
E. PROV. WATERFRONT COMMISSION	MAY 21, 2021	
CRMC	JUNE 17, 2021	
E. PROV. WATERFRONT COMMISSION	JUNE 21, 2021	
CRMC	FEB 23, 2022	

GENERAL NOTES

- PROPERTY LINE INFORMATION REFERENCED FROM PLAN ENTITLED "BOUNDARY SURVEY PLAN MAP 205 - BLOCK 1 - LOT 4 MAP 303 - BLOCK 13 - LOTS 4 & 5 ROGER WILLIAMS AVE - EAST PROVIDENCE, RI" PREPARED FOR GEONOVA DEVELOPMENT COMPANY, PREPARED BY WATERMAN ENGINEERING CO., SHEET 1 OF 1, DATED SEPT. 23, 2002, THROUGH REVISION 2 DATED 8-12-03, STAMPED AND SIGNED BY RICHARD S. LIPSITZ ON 8-15-03.
- TOPOGRAPHY AND PLANNIMETRICS OBTAINED BY BOTH ON-GROUND SURVEY PERFORMED BY NE&C IN 2005 THROUGH MULTIPLE DATA COLLECTIONS AND EXISTING CONDITIONS AERIAL PHOTOGRAMMETRY PROVIDED BY WATERMAN ENGINEERING CO. EXISTING SURVEY CONDITIONS DATA IS CURRENT AND ACCURATE AS OF DECEMBER 2005. EXISTING GROUND FEATURES UPDATED IN JANUARY 2021 BASED ON AERIAL PHOTOGRAPHY. DATUM IS NGVD29.
- SUBJECT PROPERTIES ARE ZONED WATERFRONT DISTRICT / PHILLIPSDALE LANDING.
- NORTH ARROW TAKEN FROM REFERENCE PLAN IN NOTE 1 ABOVE.
- FRESHWATER WETLAND FLAGGING WAS PERFORMED BY NATURAL RESOURCE SERVICES IN OCTOBER 2020 AND FIELD LOCATED BY NE&C. COASTAL FLAGGING PERFORMED BY MASON & ASSOCIATES, INC. IN NOVEMBER 2020 AND FIELD LOCATED BY NE&C.
- PROPERTY IS LOCATED WITH IN A FEMA ZONE "VE" (EL. 15), ZONE "VE" (EL. 13), ZONE "AE" (EL. 13), AND ZONE "X" PER FEMA FIRM 440070328J, MAP EFFECTIVE OCTOBER 2, 2015.
- THE UNDERGROUND UTILITIES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. ALL DAMAGED PORTIONS SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AFFECTED UTILITY COMPANY AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PERSONAL INJURY RESULTING FROM CONTACT WITH EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. WHEREVER CONNECTION OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW LINES. (PLEASE CALL DIG SAFE PRIOR TO CONSTRUCTION AT 1-888-DIG-SAFE AND ALL LOCAL UTILITY COMPANIES.)
- THE CONTRACTOR SHALL VERIFY THEIR PROPOSED LAYOUT AND DETAILS WITH THEIR RELATIONSHIP TO THE EXISTING SITE SURVEY. CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING WORK.
- THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATIONS OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
- THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PRESERVE STREET MONUMENTS.
- STREET MONUMENTS THAT ARE DISTURBED SHALL BE RESTORED UNDER THE LICENSED LAND SURVEYOR'S DIRECTION. ANY NEW DATA SUCH AS ELEVATIONS SHALL BE CERTIFIED BY THE SURVEYOR, AND SUBMITTED TO THE CITY OF EAST PROVIDENCE.
- DEVIATIONS OR CHANGES FROM THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE PROJECT ENGINEER, APPROPRIATE AGENCY AND OWNER.
- RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNERS EXPENSE AND BE COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO THE RELOCATION REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
- CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEERS HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR PROJECT ENGINEER."
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION INCLUDING ALL REVISIONS.
- PROJECT REQUIRES APPROVAL BY THE COASTAL RESOURCES MANAGEMENT COUNCIL.
- BORING LOCATIONS SHOWN ON PLANS WERE PERFORMED IN MARCH OF 2004.
- WORK ON THE EXISTING OSPREY POLE SHALL BE COORDINATED DIRECTLY WITH THE DEN DIVISION OF FISH AND WILDLIFE AS NO DISRUPTION TO THE NEST SITE SHALL OCCUR DURING THE ACTIVE SEASON (MARCH 15 - AUGUST 15) AND/OR A TIME OF YEAR RESTRICTION WHICH MAY BE APPLIED IN ANY ASSENT GRANTED.

UTILITY NOTES

WATER:

- THE PROPOSED WATER SYSTEM AND ALL SERVICES REQUIRE THE REVIEW AND APPROVAL OF THE EAST PROVIDENCE WATER UTILITIES DIVISION AND THE CITY ENGINEER.
- ALL VALVES SHALL BE OF A TYPE APPROVED BY THE CITY ENGINEER.
- ALL HYDRANTS SHALL BE OF AN APPROVED TYPE AND INSTALLED IN LOCATIONS SPECIFIED BY THE CITY ENGINEER AND APPROVED BY THE FIRE CHIEF. HYDRANT LOCATIONS SHOWN ON THESE PLANS ARE PRELIMINARY.
- SERVICES DIRECTLY INTO BUILDINGS REQUIRE A METER AND A BACKFLOW PREVENTER ARE REQUIRED. RPZ TYPE BACKFLOW PREVENTERS ARE REQUIRED FOR DOMESTIC SERVICES, WHILE FIRE SERVICES REQUIRE A DODA TYPE, DOMESTIC SERVICES ALSO REQUIRE A WYE-STRAINER.
- SERVICES 2-INCHES OR LESS IN DIAMETER SHALL BE TYPE K COPPER TUBING IN ACCORDANCE WITH AWWA STANDARD C-800. SERVICES OF THIS SIZE SHALL BE AT LEAST OF THIS MATERIAL TO THE WATER METER.
- SERVICES MANS OVER 2-INCHES IN DIAMETER SHALL BE DOUBLE CEMENT LINED DUCTILE IRON PIPE THICKNESS CLASS 52 IN ACCORDANCE WITH AWWA C-151. SERVICES OF THIS SIZE SHALL BE AT LEAST OF THIS MATERIAL TO THE WATER METER.
- PRESSURE TESTING OF DUCTILE IRON CEMENT LINED PIPE SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C800 STANDARDS AND EAST PROVIDENCE WATER UTILITIES DIVISION REQUIREMENTS.
- DISINFECTION OF DUCTILE IRON CEMENT LINED PIPE SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C651 AND EAST PROVIDENCE WATER UTILITIES DIVISION REQUIREMENTS.
- PRESSURE TESTING AND DISINFECTION SHALL NOT BE PERMITTED AGAINST VALVES LIVE TO THE EAST PROVIDENCE WATER UTILITIES DIVISION SYSTEM.
- WATER PIPE SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY SEWER PIPE AND AT A MINIMUM COVER OF 5- FEET, WHERE A NEW WATER PIPE IS LESS THAN 18-INCHES ABOVE A SEWER/STORM DRAIN OR BELOW SEWER/STORM DRAIN, THE SEWER/STORM DRAIN SHALL BE ENCASED IN 6-INCHES OF CONCRETE ON EITHER SIDE OF CROSSING.
- DUCTILE IRON FITTINGS SHALL BE MECHANICAL JOINT CLASS 350 CEMENT MORTAR COMPACT STYLE. FITTINGS SHALL MEET THE REQUIREMENTS OF ANSIAWWA C153/A21.53. MECHANICAL JOINTS SHALL MEET THE REQUIREMENTS OF ANSIAWWA C111/A21.11.
- SHOP DRAWINGS/CUT SHEETS FOR WATER WORKS MATERIALS TO BE UTILIZED SHALL BE SUBMITTED TO THE EAST PROVIDENCE WATER UTILITIES DIVISION 72 HOURS IN ADVANCE OF CONSTRUCTION (EXCLUDING WEEKENDS AND HOLIDAYS).
- A SEQUENCE OF CONSTRUCTION SHALL BE SUBMITTED TO THE EAST PROVIDENCE WATER UTILITIES DIVISION FOR REVIEW 72 HOURS IN ADVANCE OF CONSTRUCTION (EXCLUDING WEEKENDS AND HOLIDAYS).
- THE EAST PROVIDENCE WATER UTILITIES DIVISION SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF ANY WATER WORK. WATER WORK NOT WITNESSED/INSPECTED BY THE EAST PROVIDENCE WATER UTILITIES DIVISION IS SUBJECT TO REINSTALLATION.

ELECTRICAL AND COMMUNICATIONS:

- NEW ELECTRIC, TELEPHONE AND CABLE SERVICES SHALL BE INSTALLED UNDERGROUND.
- THE LOCATIONS OF PROPOSED ELECTRICAL CONNECTIONS TO THE EXISTING OVERHEAD SERVICES ARE PRELIMINARY, FINAL DESIGN OF THE ELECTRICAL SERVICES IS SUBJECT TO DESIGN REVIEW AND APPROVAL OF NATIONAL GRID.

SEWER:

- THE PROPOSED SEWER SERVICES AND CONNECTIONS TO EXISTING MAINS IN ROGER WILLIAMS AVENUE AND BOURNE AVENUE SUBJECT TO REVIEW AND APPROVAL BY THE EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS AND THE CITY ENGINEER.
- ALL GRAVITY SEWER MAINS AND SERVICES SHALL BE PVC, ASTM DESIGNATION D3034-SDR 35, WATER TIGHT PIPE AND FITTINGS SHALL BE USED IN ALL AREAS.
- ALL GRAVITY MAINS SHALL HAVE A MINIMUM OF 3 FEET OF COVER.
- ALL PRESSURIZED SEWER MAINS SHALL BE CLASS 200 SDR 21. ALL PUMPED LINES SHALL NOT DRAIN BACK TO PUMP STATIONS AND SHALL BE INSTALLED 4 FT BELOW GRADE. PROPER COMPACTION AN FORCE MAIN INSTALLATION SHALL BE PERFORMED TO ENSURE THAT NO LOW POINTS ARE CREATED, AIR RELIEF VALVES SHALL BE INSTALLED AS NEEDED AT ANY INTENDED HIGH POINTS IN THE SYSTEM.
- PROPOSED PUMP STATIONS SUBJECT TO FURTHER DESIGN AND APPROVAL.

GENERAL:

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS, OR CONCLUSIONS HE/SHE MAY MAKE OR DERIVE FROM THE SUBSURFACE INFORMATION OR DATA FURNISHED ON THE PLANS. THE CONTRACTOR MUST SATISFY HIMSELF/HERSELF THROUGH HIS/HER OWN INVESTIGATIONS AS TO WHAT SUBSURFACE CONDITIONS ARE TO BE ENCOUNTERED.
- IF THE CONTRACTOR ELECTS NOT TO EXPOSE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES AT CROSSINGS PRIOR TO PIPELINE EXCAVATION, HE/SHE FORFEITS HIS/HER RIGHTS FOR ANY CLAIMS FOR COMPENSATION CAUSED BY ANY CONFLICTS WITH EXISTING UTILITIES AND STRUCTURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EFFLUENT ASSOCIATED WITH THE CONSTRUCTION ACTIVITY AND THE DISINFECTION AND HYDROTESTING OPERATIONS TO SAFEGUARD PUBLIC HEALTH AND SAFETY IN ACCORDANCE WITH APPLICABLE DEPARTMENT OF HEALTH REQUIREMENTS. ALL PERMITS AND LICENSES FOR CONSTRUCTION WATER DISPOSAL, INCLUDING ALL APPLICATIONS, CHARGES, FEES, AND TAXES, ARE THE RESPONSIBILITY OF THE CONTRACTOR.

SOIL EROSION AND SEDIMENT CONTROL NOTES

- CONSTRUCTION SEQUENCE:
 - DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
 - ALL CONSTRUCTION VEHICLES SHALL ENTER AND LEAVE THE SITE VIA A PAVED ACCESS POINT OR A CONSTRUCTION ENTRANCE CONFORMING TO THE DETAIL PROVIDED.
 - INSTALL SILT FENCES, SILT SACKS, AND/OR FILTER SOCKS AS INDICATED ON THE DRAWINGS TO CONTROL EROSION AND PREVENT SEDIMENT CONTAMINATION OF DOWNSTREAM AREAS PRIOR TO ANY EARTH MOVING ACTIVITIES.
 - CONTRACTOR TO FIELD DELINEATE ALL ELUR AREAS USING EXISTING RECORDED DOCUMENTS. CONTRACTOR TO LOCATE AND DELINEATE EXISTING SEWER FORCE MAINS TO ENSURE THAT THEY ARE NOT DISTURBED DURING GRADING OPERATIONS.
 - DEMOLISH EXISTING EXISTING PAVEMENT AND IMPROVEMENTS WITH THE EXCEPTION OF OVERHEAD ELECTRICAL LINES TO REMAIN AND SEWER FORCE MAINS. SECTIONS OF EXISTING RAIL TO BE REMOVED SHALL BE COORDINATED WITH THE APPROPRIATE ENTITY. REFER TO RAILWAY CROSSING PLANS BY OTHERS.
 - ANY UTILITY POLES TO BE RELOCATED SHALL BE COORDINATED WITH NATIONAL GRID.
 - ROUGH GRADE SITE PER CONSTRUCTION GRADING PLAN. REFER TO EARTHWORK NOTES THIS SHEET.
 - BEGIN CONSTRUCTION OF DRAINAGE SYSTEM. MEDIA SHALL NOT BE PLACED IN FILTERING SYSTEM EXCAVATIONS UNTIL SITE GRADING IS COMPLETE. UNTIL THIS TIME, THESE EXCAVATIONS SHALL BE USED AS TEMPORARY SEDIMENT BASINS. CONVEYANCE SYSTEMS SHALL BE CONSTRUCTED FROM THE DOWNSTREAM ENDS OF THE PIPE LINES. TEMPORARY EROSION BLANKETS SHALL BE USED WHERE NECESSARY TO STABILIZE DRAINAGE SWALES.
 - CONSTRUCT SEWER AND WATER CONVEYANCE SYSTEMS. COORDINATE INSTALLATIONS WITH EAST PROVIDENCE PUBLIC WORKS AND THE CITY ENGINEER. CONTRACTOR TO COMPLETE ALL NECESSARY TESTING OF SEWER AND WATER SYSTEMS IN CONFORMANCE WITH CITY STANDARDS.
 - CONSTRUCT UNDERGROUND ELECTRICAL AND COMMUNICATION DISTRIBUTION SYSTEM IN COORDINATION WITH NATIONAL GRID AND OTHER SERVICE PROVIDERS.
 - FINAL GRADE SITE AND INSTALL BINDER PAVEMENT COURSE. SET CURBING PER DETAILS PROVIDED. BUILDING PADS SHALL BE LEVELED, COMPACTED AND STABILIZED FOR DEVELOPMENT BULDOZ.
 - REMOVE CONSTRUCTION SEDIMENTS FROM DRAINAGE SYSTEM AND PLACE FILTER MEDIAS.
 - INSTALL COASTAL AND DRAINAGE SYSTEM PLANTINGS ACCORDING TO APPROVED LANDSCAPING PLANS.
 - INSTALL TOP PAVEMENT COURSE AND MAINTAIN SITE IN ACCORDANCE WITH THE MAINTENANCE NOTES.

2. EARTHWORK NOTES:

- DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
- AREA OF PROPOSED DRAINAGE SYSTEM SHALL NOT BE USED FOR STOCKPILES OR STORAGE OF MATERIALS OR EQUIPMENT.
- ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE STABILIZED WITHIN FOURTEEN DAYS IN ACCORDANCE WITH TEMPORARY MEASURES IN THE VEGETATIVE PRACTICE NOTES.
- AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOP SOIL, TO REMOVE VEGETATION, ROOTS, AND ANY OTHER OBJECTIONABLE MATERIAL.
- ALL FILL SHALL BE COMPACTED TO 95% MAX. DENSITY TO REDUCE EROSION, SLIPPAGE, SETTLEMENT SUBSIDENCE, OR OTHER RELATED PROBLEMS.
- FILL INTENDED TO SUPPORT BUILDING STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL CODES AND SPECIFICATIONS.
- ALL FILL SHALL BE PLACED AND COMPACTED TO 95% MAX. DENSITY IN LAYERS NOT TO EXCEED 12" IN THICKNESS FILLS.
- FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN, SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION SUBGRADE.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.
- ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF FINISH GRADING IN ACCORDANCE WITH THE VEGETATIVE PRACTICE NOTES.
- REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED AND VEGETATED AREAS HAVE RECEIVED TWO MOWINGS.

3. VEGETATIVE PRACTICE:

PERMANENT MEASURES:

- SLOPES SHALL NOT BE STEEPER THAN 1 VERTICAL TO 3 HORIZONTAL UNLESS OTHERWISE SPECIFIED.
- LOAM AND SEED REQUIREMENTS ARE SPECIFIED IN RIDOT L01 & L02.
- A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED. THE LOAM SHALL BE GRADED TO A SMOOTH CONDITION AND STONES AND OTHER OBJECTS LARGER THAN 2 INCHES SHALL BE REMOVED.

TEMPORARY MEASURES (FOR TEMPORARY PROTECTION OF DISTURBED AREAS)

- LIMESTONE AND FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE:
LIMESTONE: 3 TONS/ACRE
FERTILIZER: (10-10-10) 600 LBS/ACRE
- SEED SHALL BE APPLIED AT THE FOLLOWING RATE:
WINTER RYE: 100 LB/ACRE
- STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE.

4. MAINTENANCE

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED, THE EROSION CONTROL MEASURES SHALL BE INSPECTED.

- AT A MINIMUM THE SILT FENCING, STRAW BALES AND FILTER SOCK BARRIERS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REGRADED ON THE SITE.
- EROSION CONTROL BLANKETS SHALL BE INSPECTED ON A WEEKLY BASIS.
- SILT SACKS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. DURING HEAVY RAIN EVENT, IT MAY BE NECESSARY TO TEMPORARILY REMOVE SACKS IN ORDER TO PREVENT FLOODING. SEDIMENT TRAPPED WITHIN SACKS SHALL BE DISPOSED OF OFF SITE AT A LICENSED FACILITY OR REGRADED ON THE SITE.
- STONE RIPRAP SHALL BE INSPECTED MONTHLY FOR EXCESSIVE ACCUMULATION OF SEDIMENT. IT MAY BE NECESSARY TO REMOVE STONES, EXCAVATE SEDIMENT, AND REPLACE STONES.
- THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE REMOVED PRIOR TO PAVING. DURING CONSTRUCTION THE ENTRANCE SHALL BE INSPECTED WEEKLY, AND RE-ESTABLISHED AS NECESSARY.
- SEEDED AREAS WILL BE FERTILIZED AND RESEED AS NECESSARY TO INSURE ESTABLISHMENT OF A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF THE CITY ENGINEER.

DRAINAGE NOTES

- ALL DRAIN PIPES ON SITE SHALL BE ADS-N12 TYPE IS OR SCH40 PVC UNLESS OTHERWISE NOTED ON THESE PLANS. CLASS IV RCP REQUIRED IN AREAS WITH LESS THAN 2 FEET OF COVER OVER DRAIN PIPES.
- ALL DRAIN STRUCTURES SHALL BE PRECAST CONCRETE AS INDICATED ON THE DETAIL SHEETS UNLESS OTHERWISE NOTED ON THESE PLANS.
- ALL PRECAST CONCRETE CATCH BASINS SHALL HAVE 3-FOOT SUMPS UNLESS OTHERWISE NOTED AS DEEP SUMP ON THE PLANS OR PROFILES IN WHICH CASE THE STRUCTURE SHALL HAVE A 4-FOOT SUMP.

PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES

- CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR AT HIS/HER EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SILT OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES, SHOULD SUCH VIOLATIONS OCCUR. THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS AS NECESSARY.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.

STORMWATER MAINTENANCE NOTES

- REFER TO OPERATIONS AND MAINTENANCE DOCUMENT FOR COMPLETE DESCRIPTION OF POST CONSTRUCTION STORMWATER MAINTENANCE. A BASIC OUTLINE OF REQUIRED MAINTENANCE IS PROVIDED BELOW.
- SAND FILTER MAINTENANCE:
 - GRASSES AND/OR SPECIFIED VEGETATION SHALL BE PLANTED AROUND AND WITHIN THE SAND FILTER IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE SLOPES AND PREVENT EROSION.
 - THE FILTER SHOULD BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ANNUALLY AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL THE 1-YEAR, 24-HOUR TYPE III PRECIPITATION EVENT (2.8 INCHES).
 - THE FOLLOWING SHALL ALSO BE COMPLETED ON AN ANNUAL BASIS:
 - THE SLOPES OF THE FILTER SHOULD BE INSPECTED FOR EROSION AND GULLING.
 - REINFORCE ANY EXISTING RIPRAP IF IT IS FOUND TO BE DEFICIENT. EROSION IS PRESENT AT THE OUTLET STRUCTURES, OR ANY EXISTING RIPRAP HAS BEEN COMPROMISED.
 - ANY AREAS WITHIN THE EXTENTS OF THE FILTER THAT ARE SUBJECT TO EROSION OR GULLING SHOULD BE REPLENISHED WITH THE ORIGINAL DESIGN MATERIAL AND RE-VEGETATED ACCORDING TO DESIGN DRAWINGS. SLOPE PROTECTION MATERIAL SHOULD BE PLACED IN AREAS PRONE TO EROSION. EMBANKMENT STABILITY SHOULD BE INSPECTED FOR SEEPAGE AND BURROWING ANIMALS.
 - MOW THE GRASS AROUND THE PERIMETER OF AND WITHIN THE FILTER. SEED BARE AREAS, AND REMOVE LITTER AND DEBRIS AT LEAST THREE TIMES PER GROWING SEASON TO MAINTAIN MAXIMUM GRASS HEIGHTS LESS THAN TWELVE INCHES. REMOVE ANY INVASIVE VEGETATION WITHIN THE EXTENTS OF THE FILTER. ANY INVASIVE VEGETATION ENCRANCHING UPON THE PERIMETER OF THE FILTER SHOULD BE PRUNED OR REMOVED IF IT IS PROHIBITING ACCESS TO THE FILTERS. COMPROMISING SIGHT VISIBILITY, AND/OR COMPROMISING THE ORIGINAL DESIGN INTENT. IF DEAD OR DYING GRASS ON THE BOTTOM IS OBSERVED, CHECK TO ENSURE THAT WATER INFILTRATES WITHIN TWO DAYS FOLLOWING STORMS.
 - SILT/SEDIMENT SHOULD BE REMOVED FROM THE FILTER BEDS ANNUALLY, WHEN ACCUMULATION EXCEEDS 1 INCH, OR WHEN THE FILTERING CAPACITY DIMINISHES SUBSTANTIALLY. IF STANDING WATER IS OBSERVED MORE THAN 48 HOURS AFTER A STORM EVENT, THEN THE TOP 6 INCHES OF MEDIA SHOULD BE REMOVED AND REPLACED. IF DISCOLORED OR CONTAMINATED MATERIAL IS FOUND BELOW THIS REMOVED SURFACE THEN THAT MATERIAL SHOULD ALSO BE REMOVED AND REPLACED UNTIL ALL CONTAMINATED SAND HAS BEEN REMOVED FROM THE FILTER MEDIA. THE SAND SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. THE FILTER SURFACE SHALL BE REPLANTED ACCORDING TO THE ORIGINAL DESIGN DOCUMENTS.

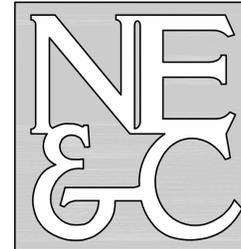
3. CONVEYANCE STRUCTURE MAINTENANCE:

- ALL STRUCTURE INLET / OUTFLOW PIPES ARE TO BE INSPECTED AT LEAST THREE TIMES IN THE FIRST SIX MONTHS OF OPERATION. EVIDENCE OF CLOGGING, OR RAPID RELEASE OF FLOW SHALL BE REPORTED TO THE PROJECT ENGINEER AND REMEDIATED IMMEDIATELY.
- CONVEYANCE STRUCTURES SHOULD BE INSPECTED QUARTERLY. ANY STRUCTURAL FAILTS SHOULD BE REPAIRED AS NECESSARY FOR PROPER FUNCTION OF THE STRUCTURE. CATCH BASIN SUMPS SHALL BE VACUUMED OUT BIANNUALLY OR EACH TIME 50% OF THE AVAILABLE STORAGE HAS BEEN DEPLETED.
- ROOF RUNOFF STRUCTURES SUCH AS GUTTERS AND DOWNSPOUTS SHOULD BE CLEAN AND FREE OF OBSTRUCTIONS THAT REDUCE FLOW. A REGISTERED PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF NECESSARY TO DETERMINE WHETHER A STRUCTURE HAS BEEN COMPROMISED.
- ALL PARKING LOTS AND ROADWAYS RE TO BE SWEEP USING A VACUUM TRUCK TWICE A YEAR.
- UPON COMPLETION OF THE CONSTRUCTION, MAINTENANCE OF THE STORMWATER SYSTEM SHALL BECOME THE RESPONSIBILITY OF THE OWNER. REFER TO THE STORMWATER OPERATIONS AND MAINTENANCE DOCUMENT.
- MAINTENANCE OF THE STORMWATER SYSTEM DURING CONSTRUCTION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

GRADING NOTES

- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE.
- ALL GRADED AREAS SHALL BE SODDED OR PLANTED IMMEDIATELY AFTER THE GRUBBING WORK HAS BEEN COMPLETED.
- THE CITY SHALL BE INFORMED OF THE LOCATION OF THE DISPOSAL SITE, IF ANY, FOR THE PROJECT.
- NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE MUNICIPALITY, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH THE COMMUNITY NOISE CONTROL STANDARDS.
- THE LIMITS OF DISTURBANCE SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND THE MUNICIPALITY.
- WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE GRADING WORK IS INITIATED.
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
- NONCOMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECT TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.

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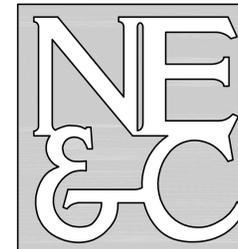
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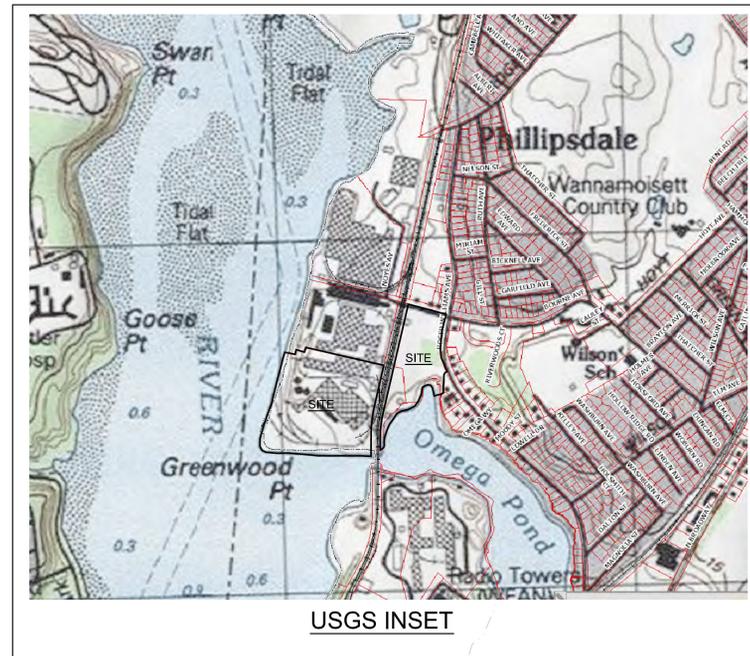
3	SUBMISSION REVISIONS	23FEB22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES		
Scale:	N/A	Date:	REV. 23FEB22
Project Title:			
"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND			
Client/Owner:			
NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903			
Issued for:			
PERMITTING			
Drawing Title:			
PROJECT NOTES			
Drawing Number:		C-2	
Sheet		2 of 23	
Project Number:		20072.0	
Survey Index:		-	
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USGS INSET

EAST POINT:
COASTAL SIDE

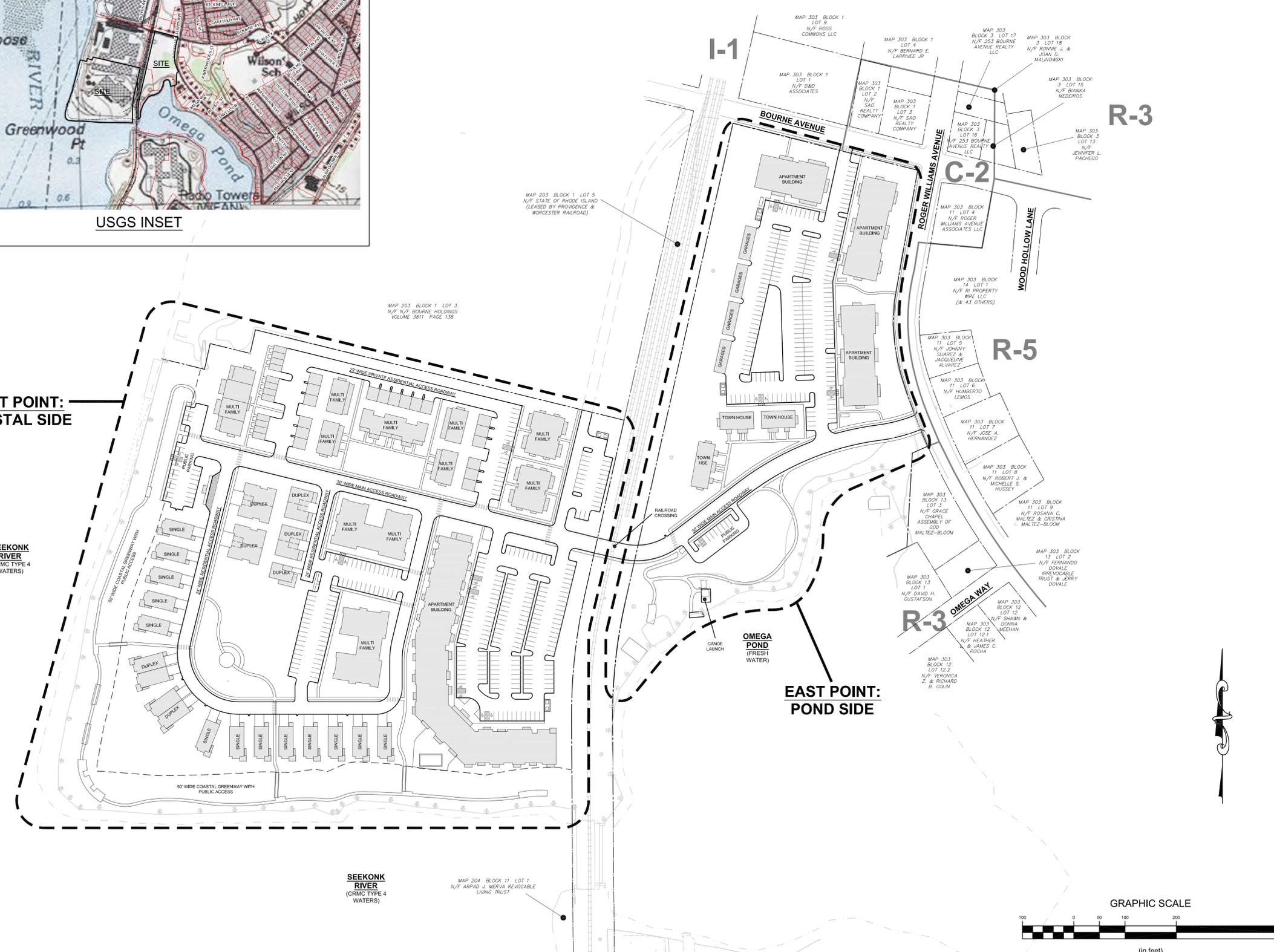
SEEKONK
RIVER
(CRMC TYPE 4
WATERS)

SEEKONK
RIVER
(CRMC TYPE 4
WATERS)

EAST POINT:
POND SIDE

CANOE LAUNCH

OMEGA
POND
(FRESH
WATER)



3	SUBMISSION REVISIONS	23FEB22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV. 23FEB22

Project Title:
"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND

Client/Owner:
NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903

Issued for:
PERMITTING

Drawing Title:
INDEX PLAN
(SHOWING 200' ABUTTERS)

JEREMY J. ROSA

No. **9826**

2/23/22

REGISTERED
PROFESSIONAL ENGINEER
CIVIL

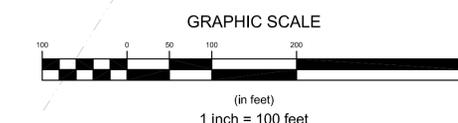
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C-3

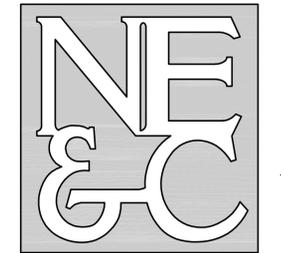
Sheet **3** of **23**

Project Number:
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LEGEND:

- PROPERTY LINE
- - - ABUTTER PROPERTY LINE
- - - UTILITY EASEMENT LINE
- - - ACCESS EASEMENT LINE
- - - FENCE LINE
- - - TOPOGRAPHIC CONTOUR
- - - SEWER MAIN (18")
- - - SEWER MAIN (DIA. UNIDENTIFIED)
- - - GAS MAIN (6")
- - - GAS MAIN (8")
- - - GAS MAIN (12")
- - - GAS MAIN (DIA. UNIDENTIFIED)
- - - WATER MAIN (10")
- - - DRAIN LINE (DIA. UNIDENTIFIED)
- - - OVERHEAD WIRES
- - - SEWER FORCE MAIN
- - - EDGE OF COASTAL FEATURE / WETLAND
- - - 50' SETBACK FROM COASTAL FEATURE / WETLAND
- - - FEMA FLOOD LINE
- - - BRUSH LINE
- ⊠ COASTAL FEATURE FLAG
- ⊠ FRESHWATER WETLAND FLAG
- ⊠ IRON ROD
- ⊠ SURVEY NAIL
- ⊠ CONCRETE BOUND
- ⊠ FIRE HYDRANT
- ⊠ DRAIN MANHOLE
- ⊠ CATCH BASIN INLET
- ⊠ SEWER MANHOLE
- ⊠ UTILITY POLE
- ⊠ LIGHT POLE
- ⊠ GUY WIRE
- ⊠ SOIL BORING LOCATION



2	SUBMISSION REVISIONS	23FEB22	
1	SUBMISSION REVISIONS	21MAY21	
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Checked by:	GES	Date:	REV 23FEB22

Project Title:
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MAP 203 BLOCK 1 LOT 4
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ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND

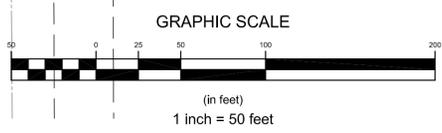
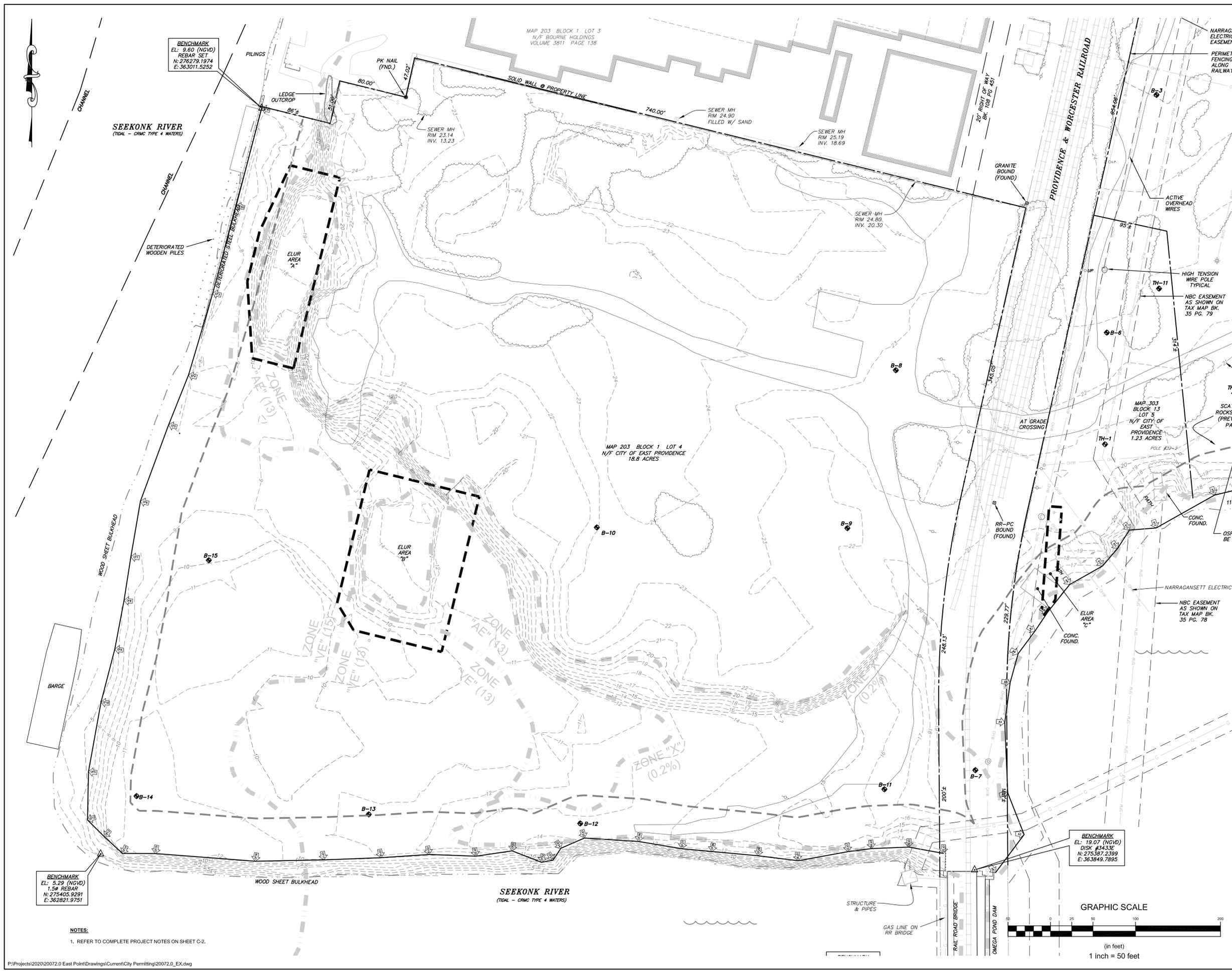
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Drawing Title:
EXISTING CONDITIONS
(COASTAL SIDE)

	Drawing Number: C-4
	Sheet 4 of 23
	Project Number: 20072.0
	Survey Index: -

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BENCHMARK
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1.5" REBAR
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E: 362821.9751

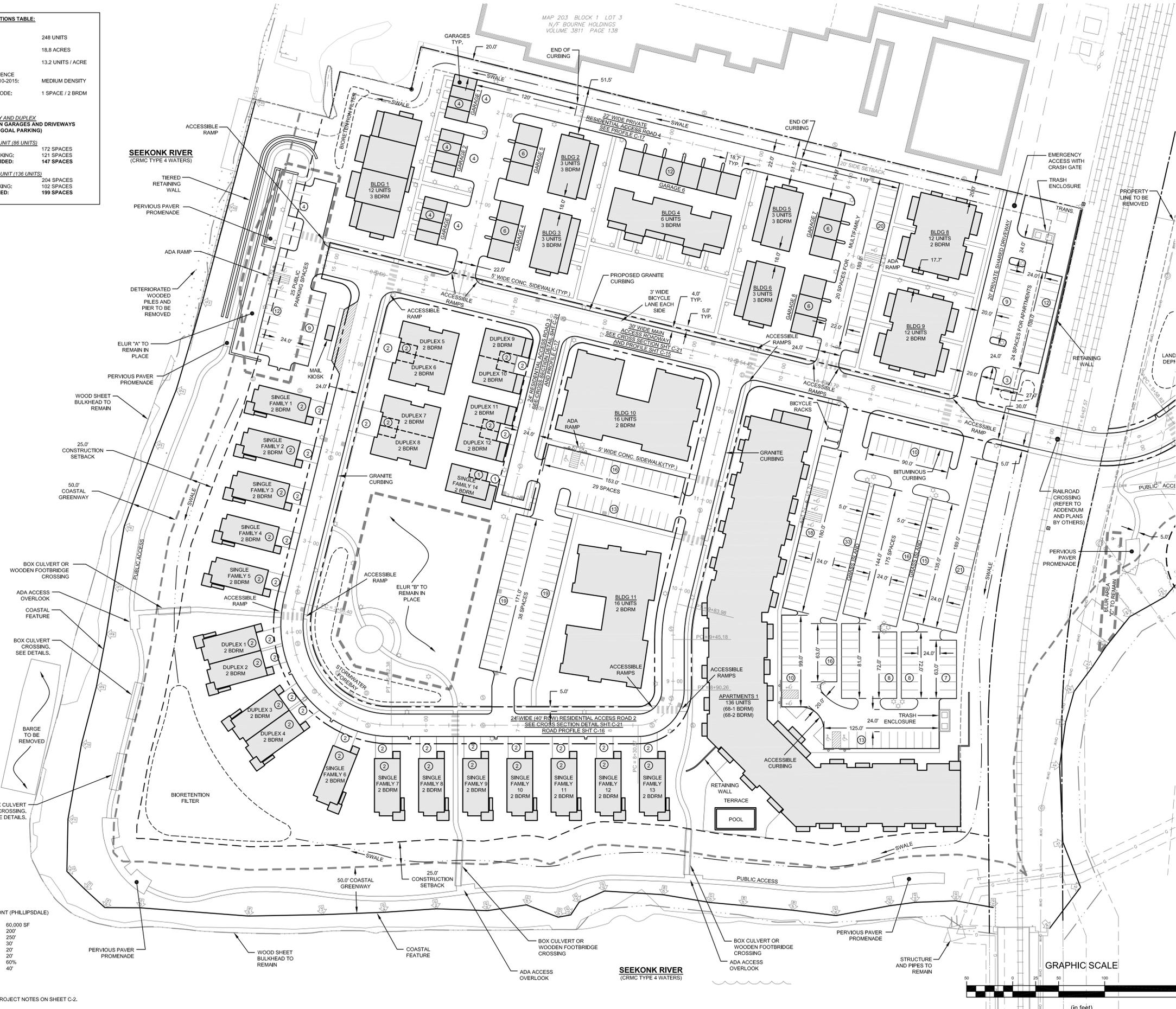
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DISK #34332
N: 276387.3399
E: 363849.7895

BENCHMARK
EL: 9.60 (NGVD)
REBAR SET
N: 276278.1974
E: 363011.5252

NOTES:
1. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

COASTAL SIDE PARKING CALCULATIONS TABLE:

TOTAL NUMBER OF UNITS:	248 UNITS
TOTAL ACREAGE:	18.8 ACRES
COASTAL SIDE DENSITY:	13.2 UNITS / ACRE
DENSITY RATING PER EAST PROVIDENCE COMPREHENSIVE PLAN UPDATE 2010-2015:	MEDIUM DENSITY
PARKING PER UNIT REQUIRED BY CODE:	1 SPACE / 2 BRDM
PARKING GOALS:	
2 SPACES PER SINGLE FAMILY AND DUPLEX (PARKING ACCOMMODATED IN GARAGES AND DRIVEWAYS MEETS CODE REQUIRED AND GOAL PARKING)	
2 SPACES PER MULTIFAMILY UNIT (86 UNITS)	
MULTIFAMILY GOAL PARKING:	172 SPACES
MULTIFAMILY CODE REQ. PARKING:	121 SPACES
MULTIFAMILY PARKING PROVIDED:	147 SPACES
1.5 SPACES PER APARTMENT UNIT (136 UNITS)	
APARTMENT GOAL PARKING:	204 SPACES
APARTMENT CODE REQ. PARKING:	102 SPACES
APARTMENT SPACES PROVIDED:	199 SPACES



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LEGEND:

---	PROPERTY LINE
---	ABUTTER PROPERTY LINE
---	UTILITY EASEMENT LINE
---	ACCESS EASEMENT LINE
---	FENCE LINE
---	EDGE OF COASTAL FEATURE / WETLAND
---	50' SETBACK FROM COASTAL FEATURE / WETLAND
---	COASTAL FEATURE FLAG
---	FRESHWATER WETLAND FLAG
---	IRON ROD
---	SURVEY NAIL
---	CONCRETE BOUND
---	FIRE HYDRANT
---	DRAIN MANHOLE
---	CATCH BASIN INLET
---	SEWER MANHOLE
---	PROPOSED CURBING
---	PROPOSED 25' CONSTRUCTION SETBACK
---	PROPOSED SWALE
---	PROPOSED PARKING CALLOUT
---	PROPOSED ADA SPACE
---	PROPOSED CATCH BASIN
---	PROPOSED DRAIN MANHOLE
---	PROPOSED SEWER MANHOLE

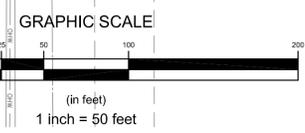
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Checked by:	GES		
Scale:	1"=50'	Date:	REV 23FEB22
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"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND			
Client/Owner:			
NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903			
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LAYOUT PLAN (COASTAL SIDE)			
Drawing Number:		C-6	
Sheet		6 of 23	
Project Number:		20072.0	
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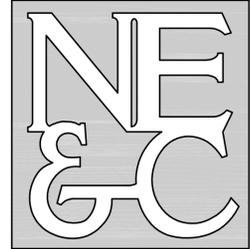
ZONING DATA: WATERFRONT (PHILLIPSDALE)

MIN. LOT AREA	60,000 SF
MIN. LOT WIDTH	200'
MIN. LOT DEPTH	250'
FRONT YARD	30'
SIDE YARD	20'
REAR YARD	20'
MAX LOT COVERAGE	60%
MAX BLDG HGT	40'

NOTES:

- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.





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LEGEND:

- PROPERTY LINE
- ADJUTER PROPERTY LINE
- UTILITY EASEMENT LINE
- ACCESS EASEMENT LINE
- FENCE LINE
- EDGE OF COASTAL FEATURE / WETLAND
- 50' SETBACK FROM COASTAL FEATURE / WETLAND
- COASTAL FEATURE FLAG
- FRESHWATER WETLAND FLAG
- IRON ROD
- SURVEY NAIL
- CONCRETE BOUND
- FIRE HYDRANT
- DRAIN MANHOLE
- CATCH BASIN INLET
- SEWER MANHOLE
- PROPOSED CURBING
- PROPOSED 25' CONSTRUCTION SETBACK
- PROPOSED SWALE
- PROPOSED PARKING CALLOUT
- PROPOSED ADA SPACE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED SEWER MANHOLE

3	SUBMISSION REVISIONS	23FEB22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV 23FEB22

Project Title:
"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND

Client/Owner:
NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903

Issued for:
PERMITTING

Drawing Title:
LAYOUT PLAN
(POND SIDE)

Drawing Number:
C-7

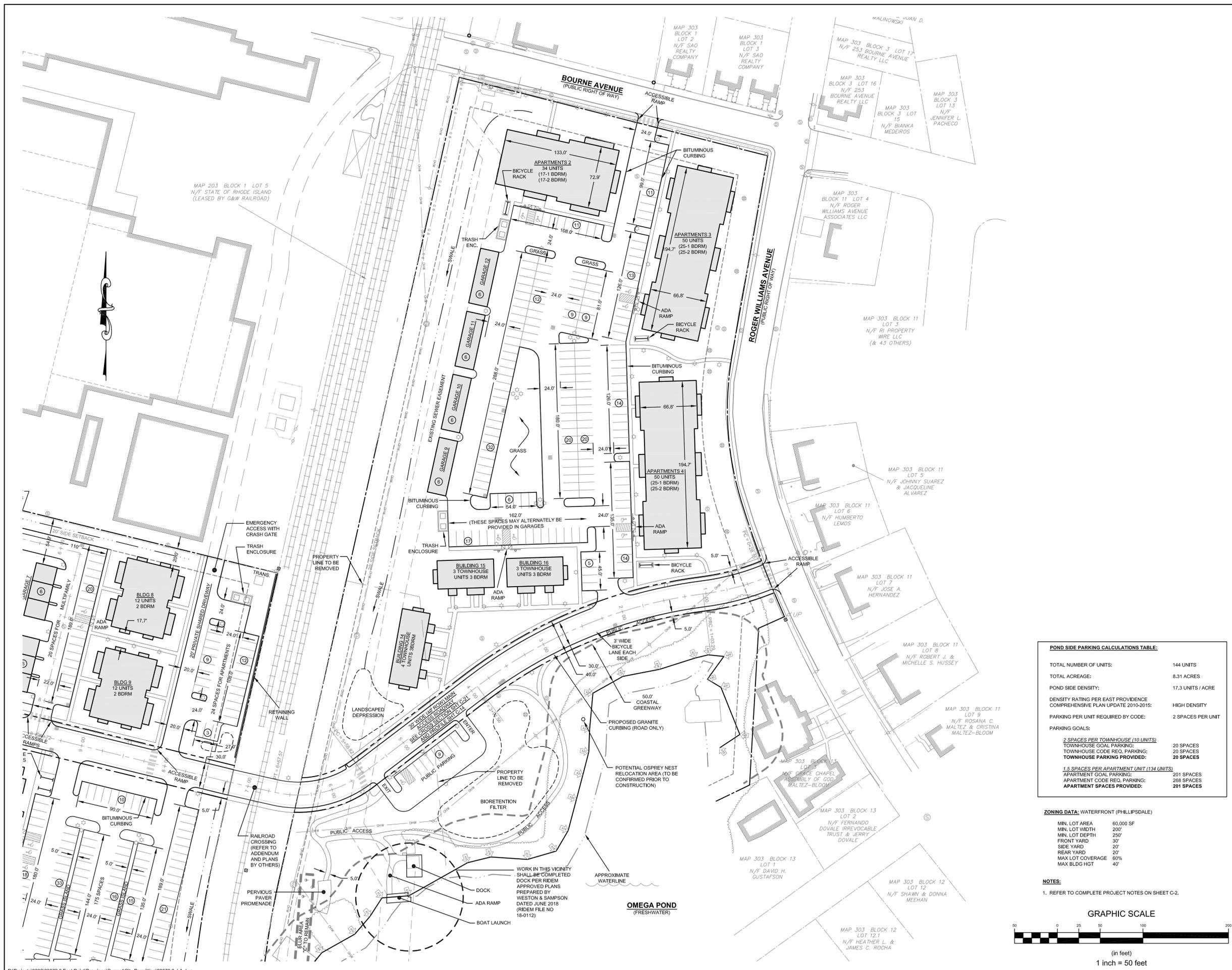
Sheet **7** of **23**

Project Number:
20072.0

Survey Index:
-

JEREMY J. ROSA
No. **9826**
2/23/22
REGISTERED PROFESSIONAL ENGINEER CIVIL

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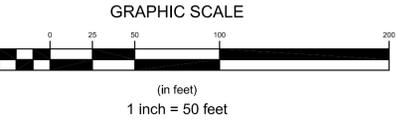
POND SIDE PARKING CALCULATIONS TABLE:

TOTAL NUMBER OF UNITS:	144 UNITS
TOTAL ACREAGE:	8.31 ACRES
POND SIDE DENSITY:	17.3 UNITS / ACRE
DENSITY RATING PER EAST PROVIDENCE COMPREHENSIVE PLAN UPDATE 2010-2015:	HIGH DENSITY
PARKING PER UNIT REQUIRED BY CODE:	2 SPACES PER UNIT
PARKING GOALS:	
2 SPACES PER TOWNHOUSE (10 UNITS)	20 SPACES
TOWNHOUSE GOAL PARKING:	20 SPACES
TOWNHOUSE CODE REQ. PARKING:	20 SPACES
TOWNHOUSE PARKING PROVIDED:	20 SPACES
1.5 SPACES PER APARTMENT UNIT (134 UNITS)	
APARTMENT GOAL PARKING:	201 SPACES
APARTMENT CODE REQ. PARKING:	268 SPACES
APARTMENT SPACES PROVIDED:	201 SPACES

ZONING DATA: WATERFRONT (PHILLIPSDALE)

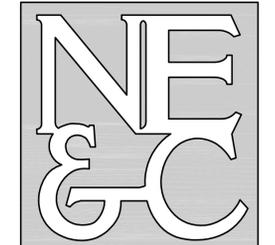
MIN. LOT AREA	60,000 SF
MIN. LOT WIDTH	200'
MIN. LOT DEPTH	250'
FRONT YARD	30'
SIDE YARD	20'
REAR YARD	20'
MAX LOT COVERAGE	80%
MAX BLDG HGT	40'

NOTES:
1. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.



MAP 203 BLOCK 1 LOT 3
N/F BOURNE HOLDINGS
VOLUME 3811 PAGE 138

NORTHEAST ENGINEERS
& CONSULTANTS, INC.



- SITE/CIVIL
- LAND PLANNING
- WATERFRONT
- SURVEYING
- GEOTECHNICAL
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- TRANSPORTATION
- STRUCTURAL

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Symbol	Description
---	PROPERTY LINE
---	ADJUTER PROPERTY LINE
---	ACCESS EASEMENT LINE
---	FENCE LINE
---	TOPOGRAPHIC CONTOUR
S 18	SEWER MAIN (18")
S	SEWER MAIN (DIA. UNIDENTIFIED)
G 6	GAS MAIN (6")
G 8	GAS MAIN (8")
G 12	GAS MAIN (12")
G	GAS MAIN (DIA. UNIDENTIFIED)
W 10	WATER MAIN (10")
W	DRAIN LINE (DIA. UNIDENTIFIED)
---	OVERHEAD WIRES
---	SEWER FORCE MAIN
---	EDGE OF COASTAL FEATURE / WETLAND
---	50' SETBACK FROM COASTAL FEATURE / WETLAND
+	COASTAL FEATURE FLAG
+	FRESHWATER WETLAND FLAG
+	IRON ROD
+	SURVEY NAIL
+	CONCRETE BOUND
+	FIRE HYDRANT
+	DRAIN MANHOLE
+	CATCH BASIN INLET
+	SEWER MANHOLE
---	PROPOSED 25' CONSTRUCTION SETBACK
---	PROPOSED DRAIN LINE
---	PROPOSED CONTOUR
+20.0	PROPOSED SPOT ELEVATION
+	PROPOSED CATCH BASIN
+	PROPOSED DRAIN MANHOLE
W 8	PROPOSED 8" WATER MAIN
W	PROPOSED WATER SERVICE
S 8	PROPOSED 8" SEWER MAIN
S 6	PROPOSED 6" SEWER SERVICE
SFM	PROPOSED SEWER FORCE MAIN
E	PROPOSED UG ELECTRICAL CONDUIT
E	PROPOSED SEWER MANHOLE
E	PROPOSED WATER GATE / SERVICE



No.	Revision	Date	App.
4	SUBMISSION REVISIONS	23FEB22	
3	WATER AND SEWER REVISIONS	02NOV21	
2	SUBMISSION REVISIONS	21JUN21	

Designed By: **JJR** Drawn by: **JJR** Checked by: **GES**
Scale: 1"=50' Date: **REV 23FEB22**

Project Title:
**"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND**

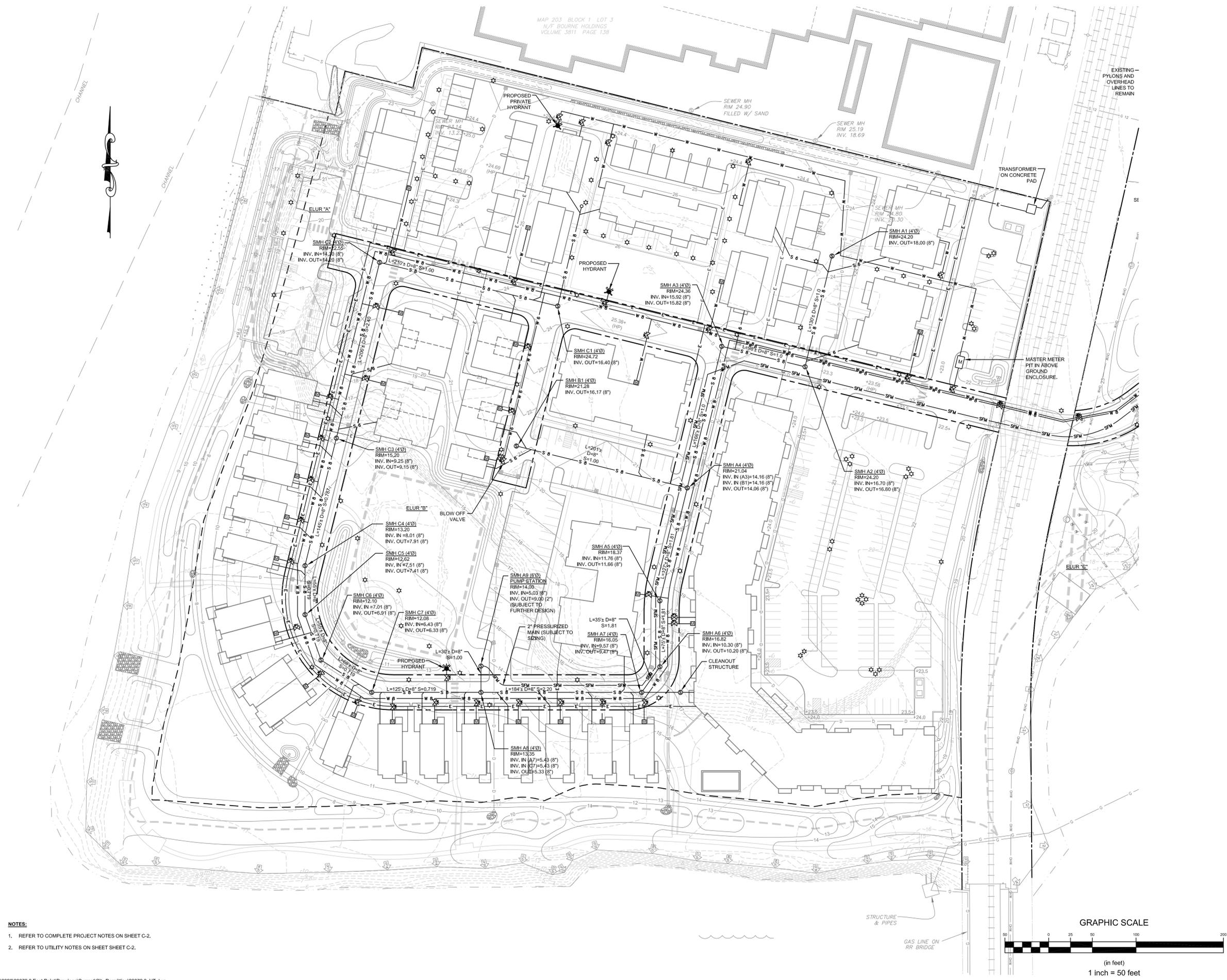
Client/Owner:
**NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903**

Issued for:
PERMITTING

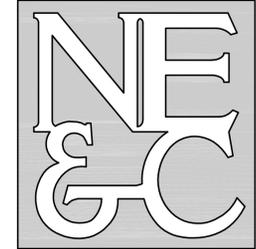
Drawing Title:
**UTILITY PLAN
(COASTAL SIDE)**

	Drawing Number: C-8
	Sheet 8 of 23
	Project Number: 20072.0
	Survey Index: -

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- NOTES:**
- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.
 - REFER TO UTILITY NOTES ON SHEET C-2.



- SITE/CIVIL
- LAND PLANNING
- WATERFRONT
- SURVEYING
- GEOTECHNICAL
- ENVIRONMENTAL
- TRANSPORTATION
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---	PROPERTY LINE
---	ACCESS EASEMENT LINE
---	FENCE LINE
---	TOPOGRAPHIC CONTOUR
---	SEWER MAIN (18")
---	SEWER MAIN (DIA. UNIDENTIFIED)
---	GAS MAIN (6")
---	GAS MAIN (8")
---	GAS MAIN (12")
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---	PROPOSED 25' CONSTRUCTION SETBACK
---	PROPOSED DRAIN LINE
---	PROPOSED CONTOUR
---	PROPOSED SPOT ELEVATION
---	PROPOSED CATCH BASIN
---	PROPOSED DRAIN MANHOLE
---	PROPOSED 8" WATER MAIN
---	PROPOSED WATER SERVICE
---	PROPOSED 8" SEWER MAIN
---	PROPOSED 6" SEWER SERVICE
---	PROPOSED SEWER FORCE MAIN
---	PROPOSED UG ELECTRICAL CONDUIT
---	PROPOSED SEWER MANHOLE
---	PROPOSED WATER GATE / SERVICE

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3	WATER REVISIONS	02NOV21	
2	SUBMISSION REVISIONS	21JUN21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV 23FEB22

Project Title:
"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
 ROGER WILLIAMS AVENUE
 EAST PROVIDENCE
 RHODE ISLAND

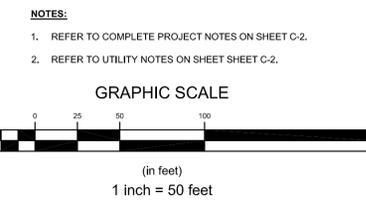
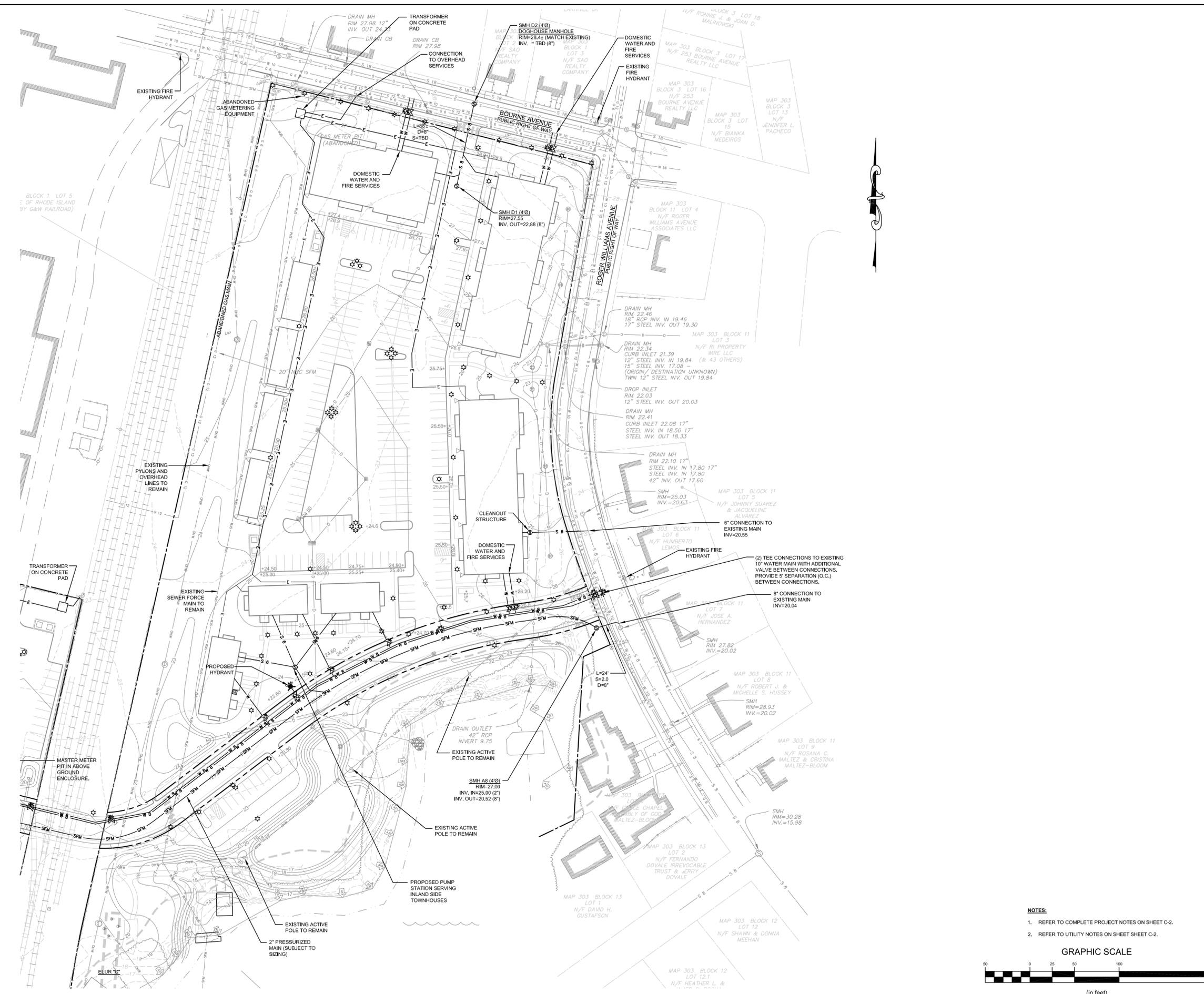
Client/Owner:
 NOBLE DEVELOPMENT, LLC
 10 GREEN STREET
 PROVIDENCE, RI 02903

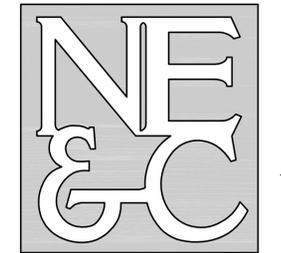
Issued for:
 PERMITTING

Drawing Title:
UTILITY PLAN
 (POND SIDE)

	Drawing Number: C-9
	Sheet 9 of 23
	Project Number: 20072.0
	Survey Index: -

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LEGEND:

- PROPERTY LINE
- - - BUTTER PROPERTY LINE
- - - ACCESS EASEMENT LINE
- - - FENCE LINE
- - - TOPOGRAPHIC CONTOUR
- S 18" SEWER MAIN (DIA. UNIDENTIFIED)
- G 6" GAS MAIN (6")
- G 8" GAS MAIN (8")
- G 12" GAS MAIN (12")
- G 18" GAS MAIN (DIA. UNIDENTIFIED)
- W 10" WATER MAIN (DIA. UNIDENTIFIED)
- D 10" DRAIN LINE (DIA. UNIDENTIFIED)
- OHW OVERHEAD WIRES
- SWW SEWER FORCE MAIN
- EDGE OF COASTAL FEATURE / WETLAND
- 50' SETBACK FROM COASTAL FEATURE / WETLAND
- FEMA FLOOD LINE
- COASTAL FEATURE FLAG
- FRESHWATER WETLAND FLAG
- IRON ROD
- SURVEY NAIL
- CONCRETE BOUND
- FIRE HYDRANT
- DRAIN MANHOLE
- CATCH BASIN INLET
- SEWER MANHOLE
- PROPOSED 25' CONSTRUCTION SETBACK
- PROPOSED DRAIN LINE
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION

3	SUBMISSION REVISIONS	23FEB22
2	SUBMISSION REVISIONS	21JUN21
1	SUBMISSION REVISIONS	21MAY21

No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES		
Scale:	1"=50'	Date:	REV 23FEB22

Project Title:
**"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND**

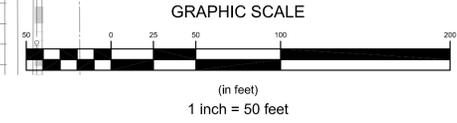
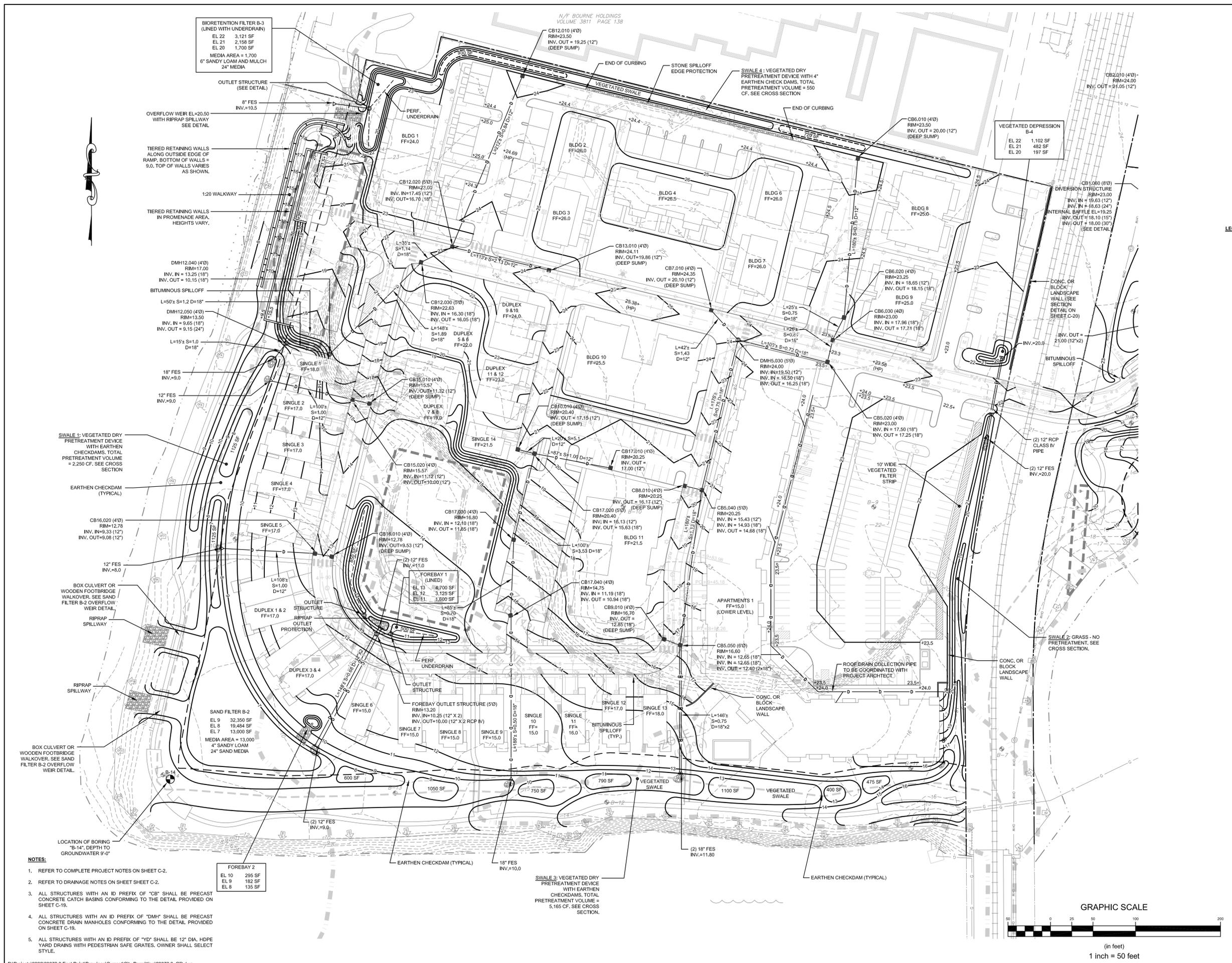
Client/Owner:
**NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903**

Issued for:
PERMITTING

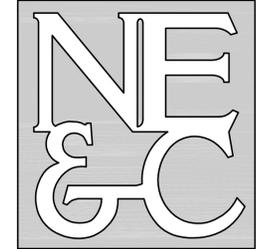
Drawing Title:
**GRADING AND DRAINAGE
(COASTAL SIDE)**

	Drawing Number:	C-10
	Sheet	10 of 23
	Project Number:	20072.0
	Survey Index:	

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- NOTES:
- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.
 - REFER TO DRAINAGE NOTES ON SHEET SHEET C-2.
 - ALL STRUCTURES WITH AN ID PREFIX OF "CB" SHALL BE PRECAST CONCRETE CATCH BASINS CONFORMING TO THE DETAIL PROVIDED ON SHEET C-19.
 - ALL STRUCTURES WITH AN ID PREFIX OF "DMH" SHALL BE PRECAST CONCRETE DRAIN MANHOLES CONFORMING TO THE DETAIL PROVIDED ON SHEET C-19.
 - ALL STRUCTURES WITH AN ID PREFIX OF "YD" SHALL BE 12" DIA. HDPE YARD DRAINS WITH PEDESTRIAN SAFE GRATES. OWNER SHALL SELECT STYLE.



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 TRANSPORTATION
 STRUCTURAL



LEGEND:

---	PROPERTY LINE
---	ABUTTER PROPERTY LINE
---	ACCESS EASEMENT LINE
---	FENCE LINE
---	TOPOGRAPHIC CONTOUR
---	SEWER MAIN (18")
---	SEWER MAIN (DIA. UNIDENTIFIED)
---	GAS MAIN (6")
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---	FIRE HYDRANT
---	DRAIN MANHOLE
---	CATCH BASIN INLET
---	SEWER MANHOLE
---	PROPOSED 25' CONSTRUCTION SETBACK
---	PROPOSED DRAIN LINE
---	PROPOSED CONTOUR
---	PROPOSED SPOT ELEVATION

3	SUBMISSION REVISIONS	23FEB22			
2	SUBMISSION REVISIONS	21JUN21			
1	SUBMISSION REVISIONS	21MAY21			
No.	Revision	Date	App.		
Designed By:	JJR	Drawn by:	JJR	Checked by:	GES
Scale:	1"=50'	Date:	REV 23FEB22		

"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
 ROGER WILLIAMS AVENUE
 EAST PROVIDENCE
 RHODE ISLAND

Client/Owner:
NOBLE DEVELOPMENT, LLC
 10 GREEN STREET
 PROVIDENCE, RI 02903

Issued for:
 PERMITTING

GRADING AND DRAINAGE
 (POND SIDE)

Drawing Number:
C-11

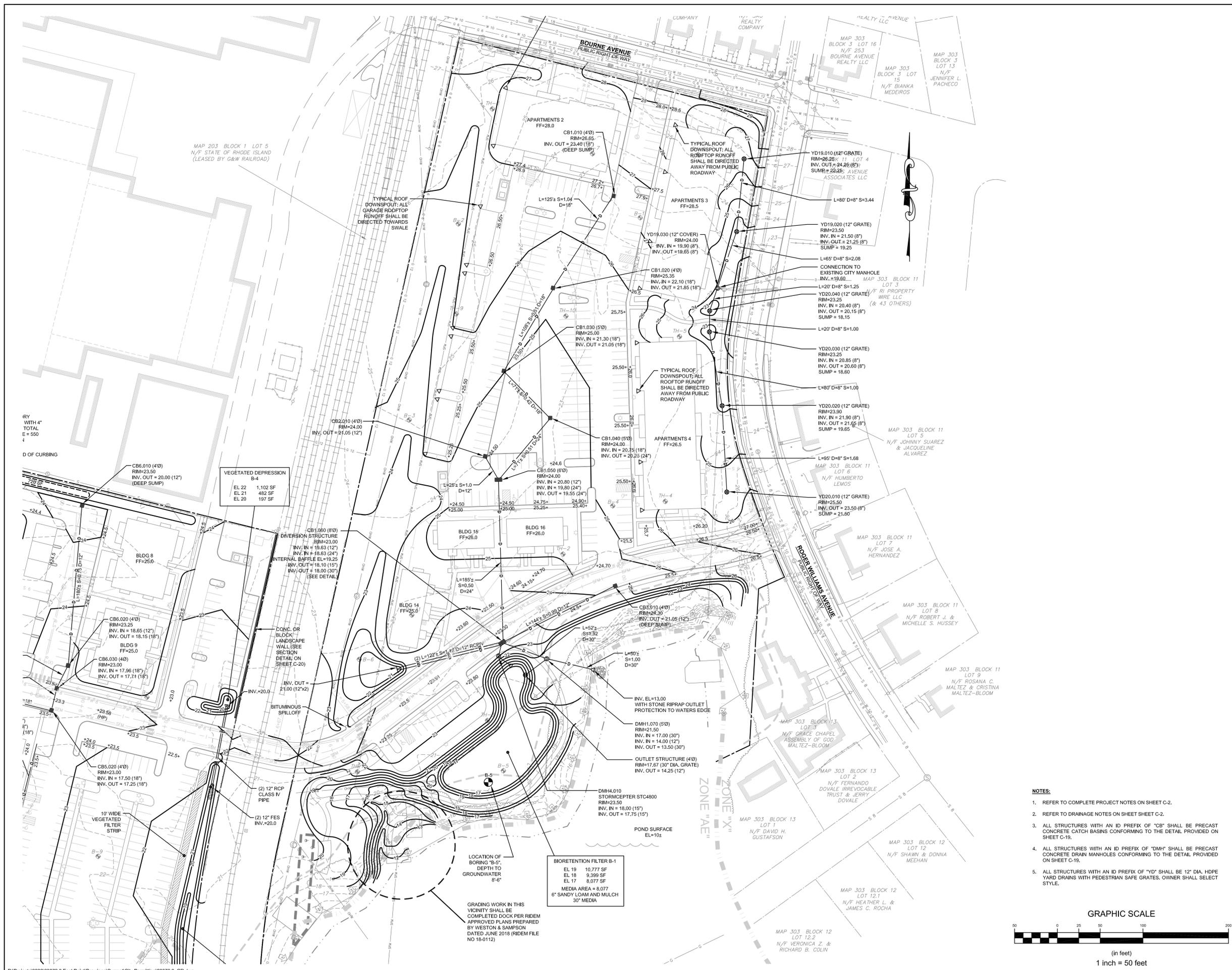
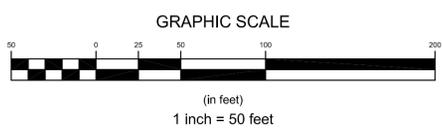
Sheet **11** of **23**

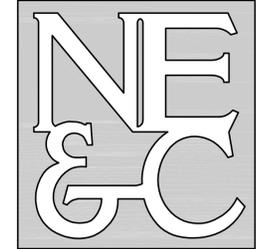
Project Number:
20072.0

Survey Index:



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LEGEND:

	PROPERTY LINE
	ABUTTER PROPERTY LINE
	ACCESS EASEMENT LINE
	FENCE LINE
	TOPOGRAPHIC CONTOUR
	SEWER MAIN (18")
	SEWER MAIN (12")
	SEWER MAIN (8")
	SEWER MAIN (6")
	GAS MAIN (12")
	GAS MAIN (8")
	GAS MAIN (6")
	WATER MAIN (10")
	WATER MAIN (8")
	WATER MAIN (6")
	DRAIN LINE (12")
	DRAIN LINE (8")
	DRAIN LINE (6")
	OVERHEAD WIRES
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	EDGE OF COASTAL FEATURE / WETLAND
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	COASTAL FEATURE FLAG
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	IRON ROD
	SURVEY NAIL
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	FIRE HYDRANT
	DRAIN MANHOLE
	CATCH BASIN INLET
	SEWER MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED DRAIN MANHOLE
	PROPOSED 8" WATER MAIN
	PROPOSED 6" SEWER MAIN
	PROPOSED SEWER FORCE MAIN
	PROPOSED UG ELECTRICAL CONDUIT
	PROPOSED CONSTRUCTION GRADING
	PROPOSED EROSION CONTROL BARRIER
	PROPOSED STRAW BALE ROW
	PROPOSED CONSTRUCTION FENCING



3	SUBMISSION REVISIONS	23FEB22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV23FEB22

Project Title:
"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND

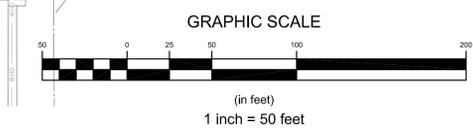
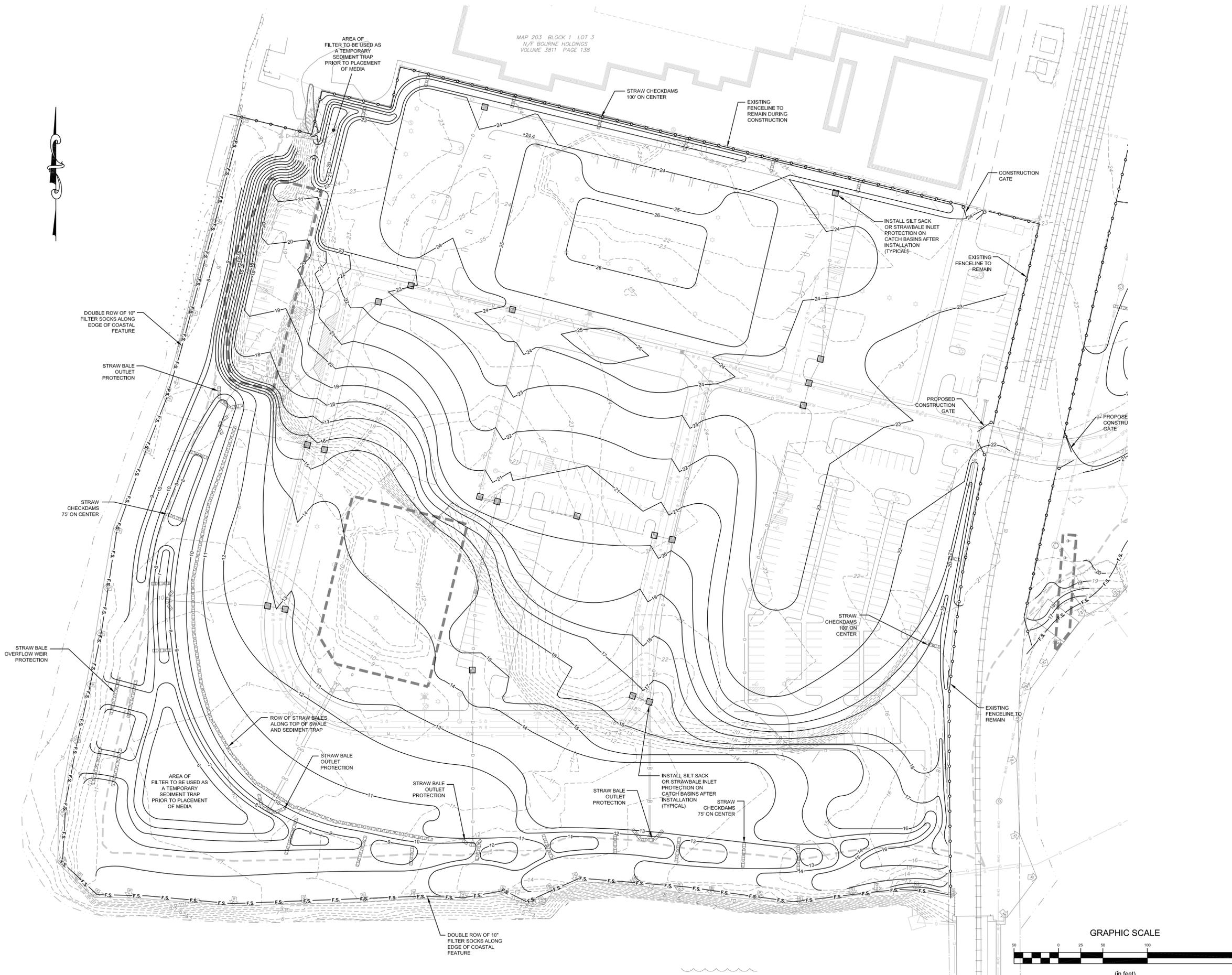
Client/Owner:
NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903

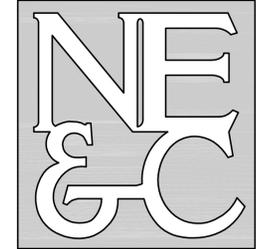
Issued for:
PERMITTING

Drawing Title:
**SOIL EROSION AND
SEDIMENT CONTROL**
(SHOWING CONSTRUCTION GRADING)
(COASTAL SIDE)

	Drawing Number:	C-12
	Sheet	12 of 23
	Project Number:	20072.0
	Survey Index:	-

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- GEOTECHNICAL
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- TRANSPORTATION
- STRUCTURAL



LEGEND:

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- GAS MAIN (DIA. UNIDENTIFIED)
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- SEWER MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
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- PROPOSED 8" SEWER MAIN
- PROPOSED SEWER FORCE MAIN
- PROPOSED UG ELECTRICAL CONDUIT
- PROPOSED CONSTRUCTION GRADING
- F.S. --- F.S. --- PROPOSED EROSION CONTROL BARRIER
- PROPOSED STRAW BALE ROW
- PROPOSED CONSTRUCTION FENCING



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Checked by:	GES	Date:	REV 23FEB22

Project Title:
"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
 ROGER WILLIAMS AVENUE
 EAST PROVIDENCE
 RHODE ISLAND

Client/Owner:
 NOBLE DEVELOPMENT, LLC
 10 GREEN STREET
 PROVIDENCE, RI 02903

Issued for:
 PERMITTING

Drawing Title:
**SOIL EROSION AND
 SEDIMENT CONTROL**
 (SHOWING CONSTRUCTION GRADING)
 (POND SIDE)

JEREMY J. ROSA
 No. **9826**
 2/23/22
 REGISTERED
 PROFESSIONAL ENGINEER
 CIVIL

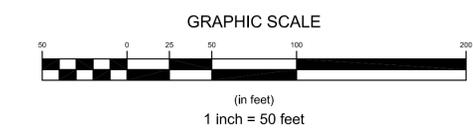
Drawing Number:
C-13

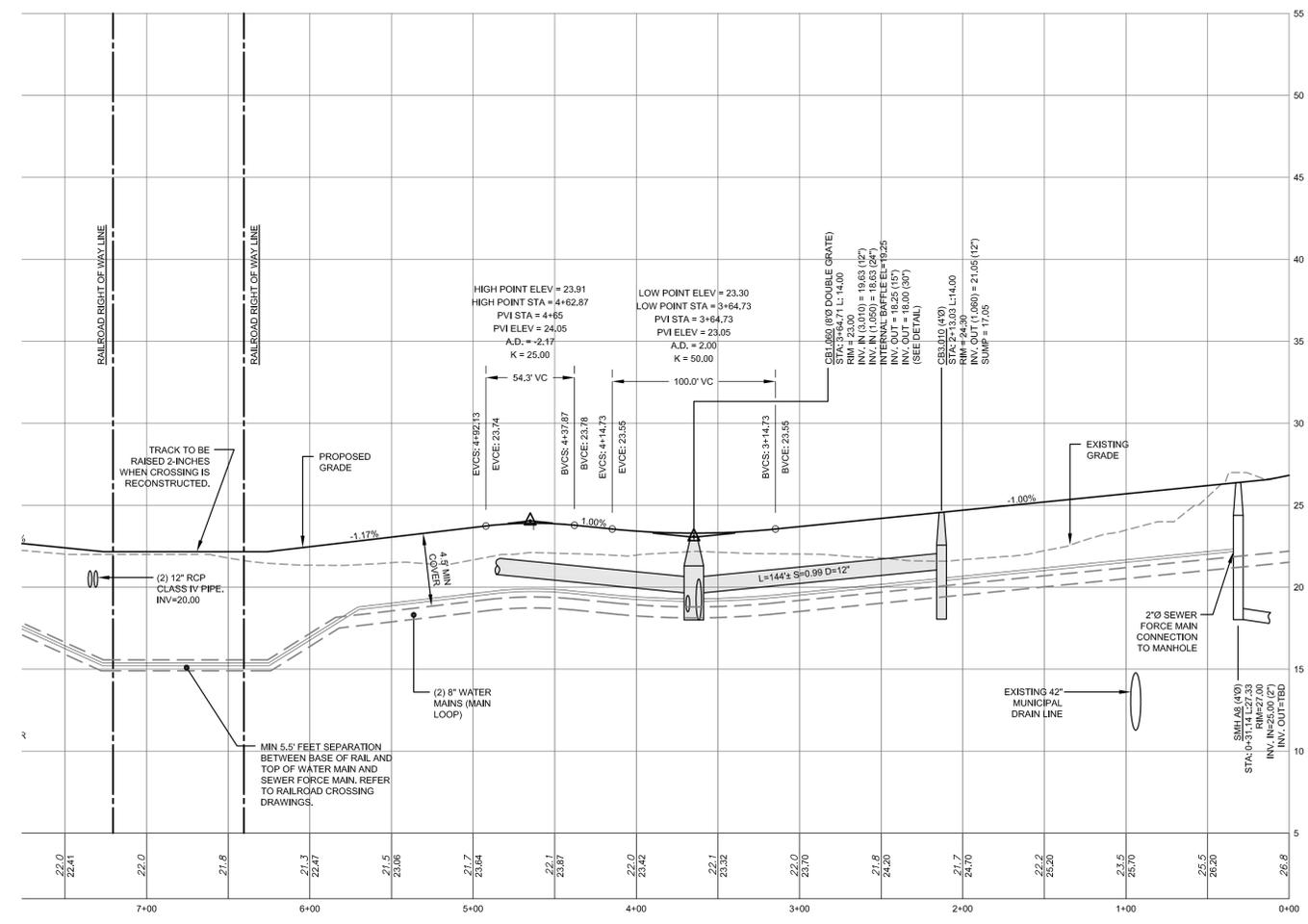
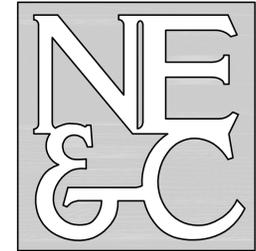
Sheet **13** of **23**

Project Number:
20072.0

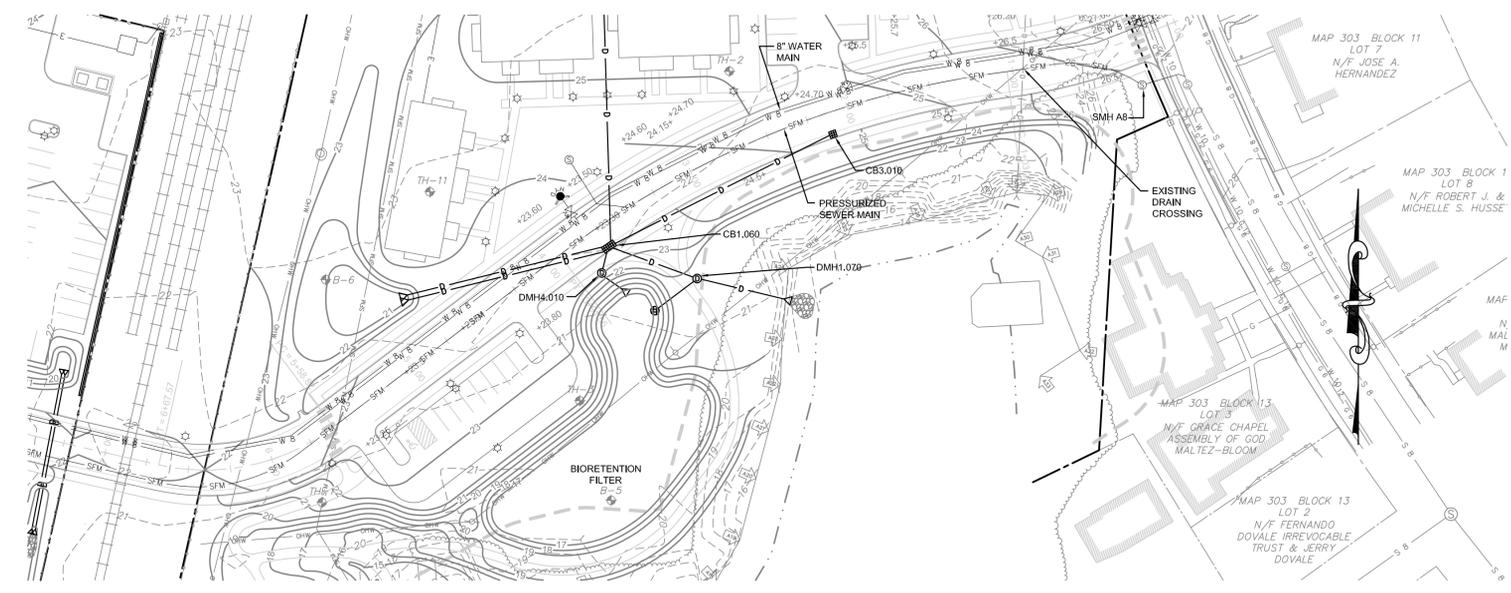
Survey Index:
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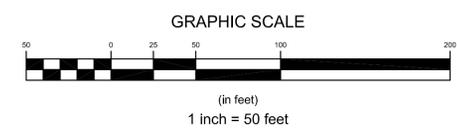




MAIN ACCESS ROAD 1 PROFILE (POND SIDE)
 HORIZONTAL SCALE: 1" = 50'
 VERTICAL SCALE: 1" = 5'



MAIN ACCESS ROAD 1 PLAN (POND SIDE)
 SCALE: 1" = 50'



NOTES:

- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

No.	Revision	Date	App.
4	SUBMISSION REVISIONS	23FEB22	
3	RAILROAD COMMENTS	24JAN22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	

Designed By: **JJR** Drawn by: **JJR** Checked by: **GES**
 Scale: 1"=50' Date: **REV 23FEB22**

"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
 ROGER WILLIAMS AVENUE
 EAST PROVIDENCE
 RHODE ISLAND

Client/Owner:
NOBLE DEVELOPMENT, LLC
 10 GREEN STREET
 PROVIDENCE, RI 02903

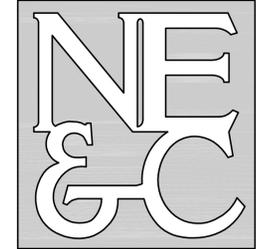
Issued for:
PERMITTING

Drawing Title:
ROAD PROFILE
 SHEET 1
 (MAIN ACCESS ROAD POND SIDE)



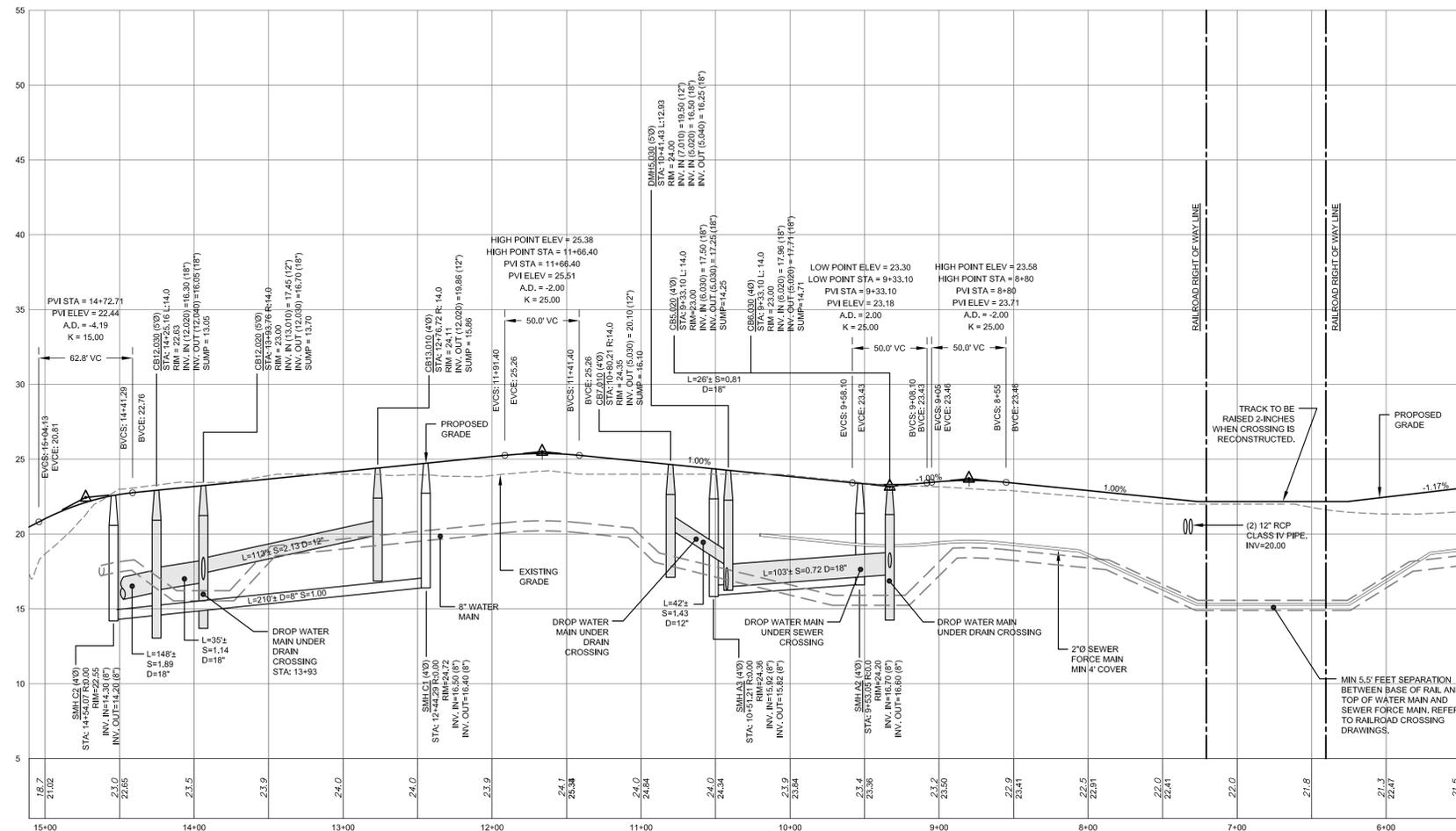
Drawing Number:
C-14
 Sheet **14** of **23**
 Project Number:
20072.0
 Survey Index:
 -

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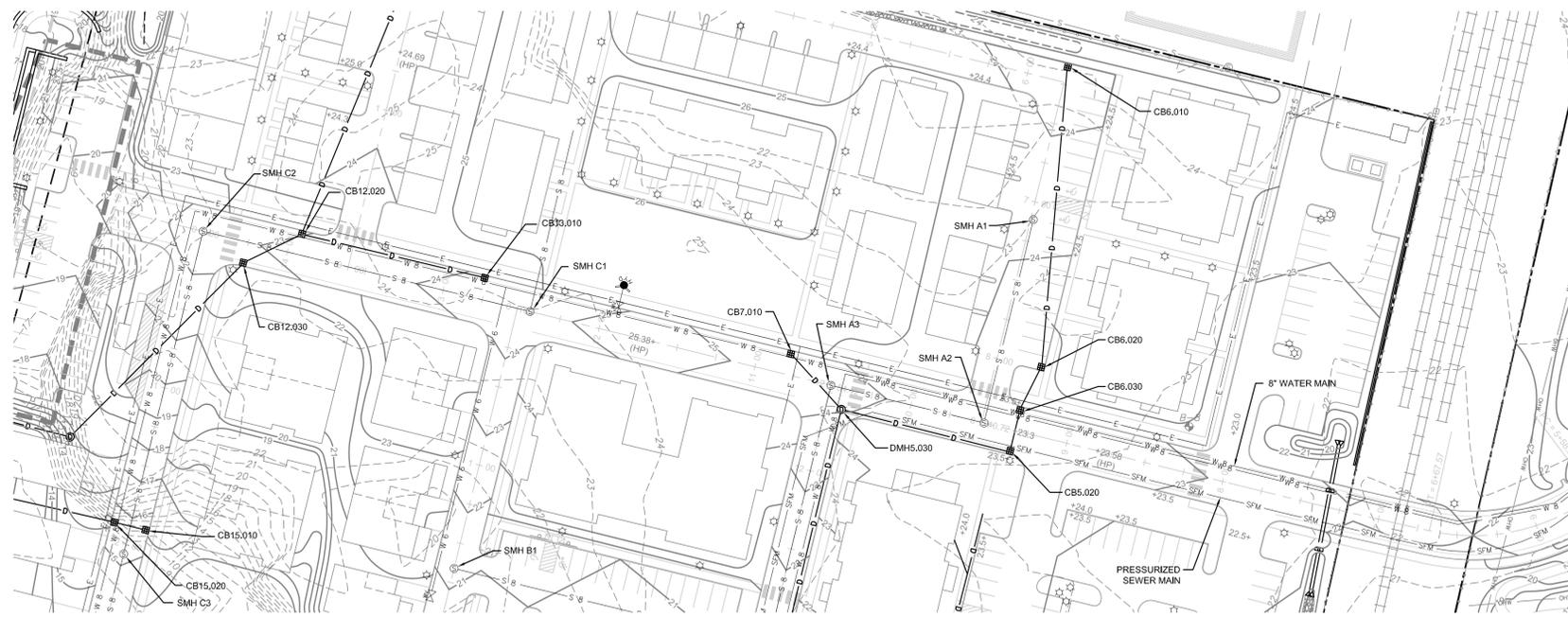


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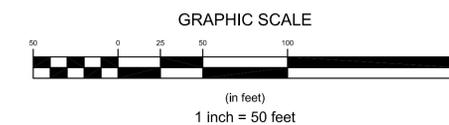
6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842
PHONE (401) 849-0810 FAX (401) 846-4169
WWW.NORTHEASTENGINEERS.COM



MAIN ACCESS ROAD 1 PROFILE (COASTAL SIDE)
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



MAIN ACCESS ROAD 1 PLAN (COASTAL SIDE)
SCALE: 1" = 50'



NOTES:

- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

No.	Revision	Date	App.
4	SUBMISSION REVISIONS	23FEB22	
3	RAILROAD COMMENTS	24JAN22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	

Designed By: JJR Drawn by: JJR Checked by: GES
Scale: 1"=50' Date: REV 23FEB22

Project Title:
"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND

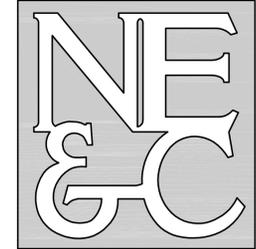
Client/Owner:
NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903

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PERMITTING

Drawing Title:
ROAD PROFILE
SHEET 2
(MAIN ACCESS ROAD COASTAL SIDE)

	Drawing Number: C-15
	Sheet 15 of 23
	Project Number: 20072.0
	Survey Index: -

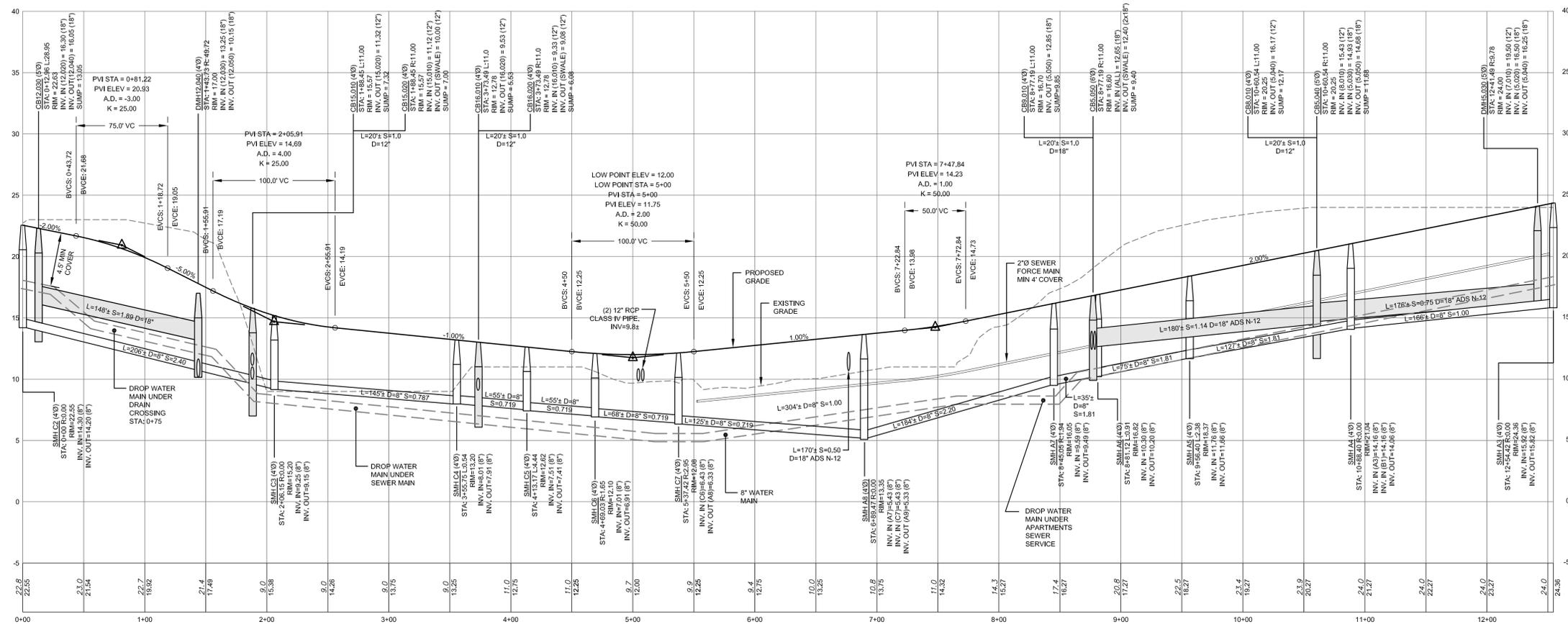
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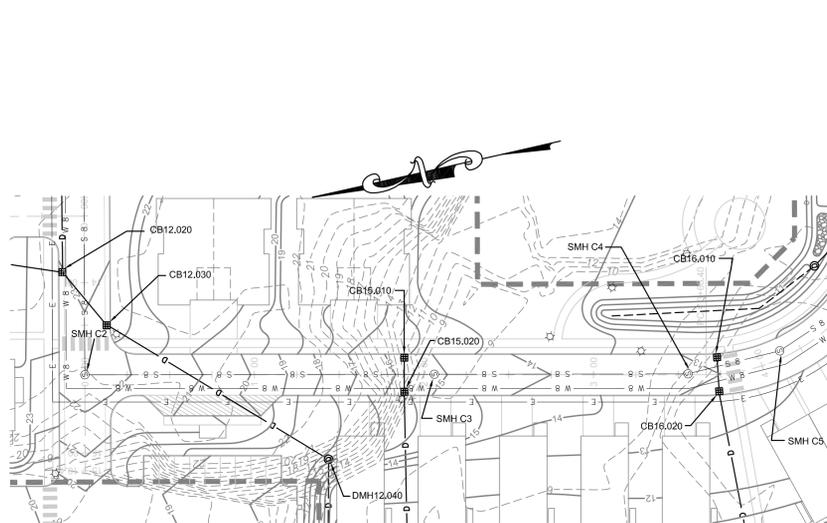
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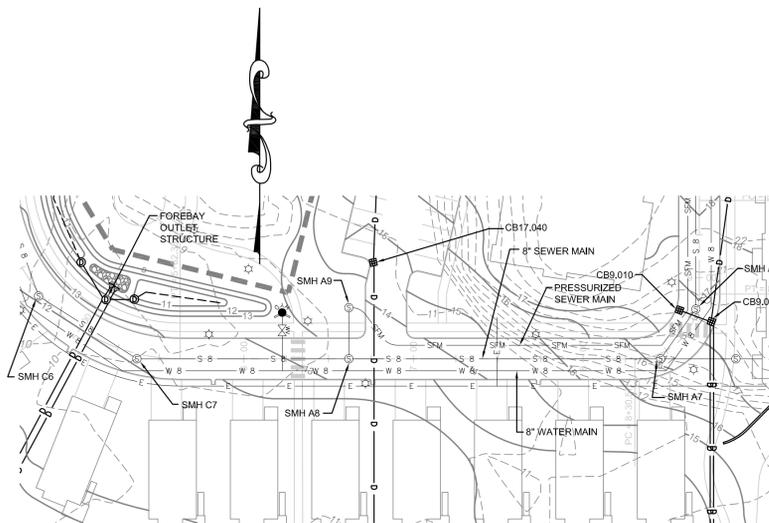
- SITE/CIVIL
- LAND PLANNING
- WATERFRONT
- SURVEYING
- GEOTECHNICAL
- ENVIRONMENTAL
- TRANSPORTATION
- STRUCTURAL



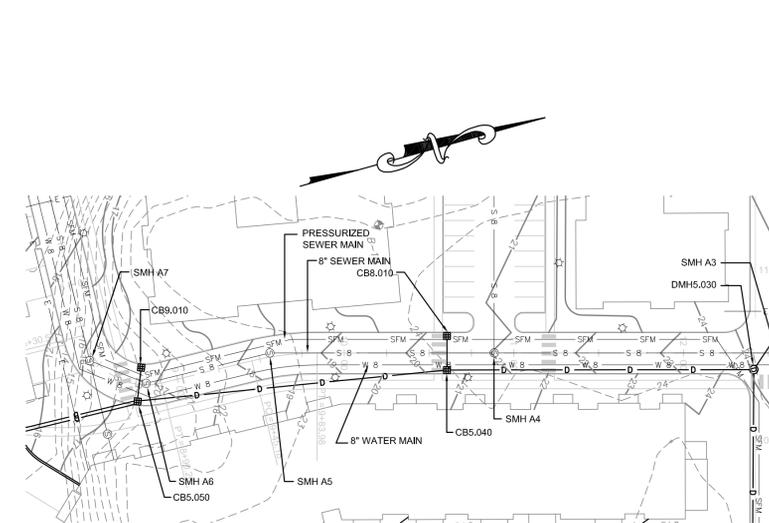
RESIDENTIAL ACCESS ROAD 2 PROFILE
 HORIZONTAL SCALE: 1" = 50'
 VERTICAL SCALE: 1" = 5'



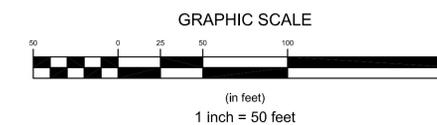
RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 1)
 SCALE: 1" = 50'



RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 2)
 SCALE: 1" = 50'



RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 3)
 SCALE: 1" = 50'



NOTES:

- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

No.	Revision	Date	App.
3	SUBMISSION REVISIONS	23FEB22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	

Designed By: **JJR** Drawn by: **JJR** Checked by: **GES**
 Scale: 1"=50' Date: **REV 23FEB22**

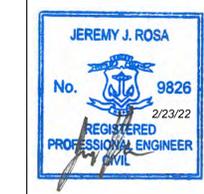
Project Title:
"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
 ROGER WILLIAMS AVENUE
 EAST PROVIDENCE
 RHODE ISLAND

Client/Owner:
NOBLE DEVELOPMENT, LLC
 10 GREEN STREET
 PROVIDENCE, RI 02903

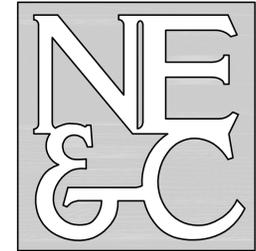
Issued for:
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Drawing Title:
ROAD PROFILE
 SHEET 3
 (RESIDENTIAL ACCESS ROAD 2)

Drawing Number: **C-16**
 Sheet **16** of **23**
 Project Number: **20072.0**
 Survey Index: -

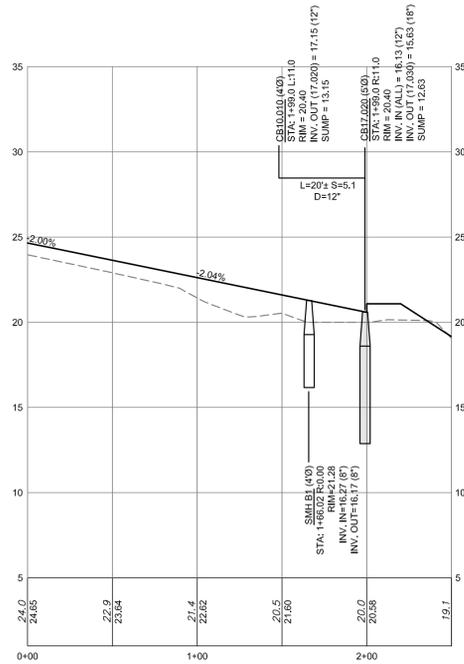


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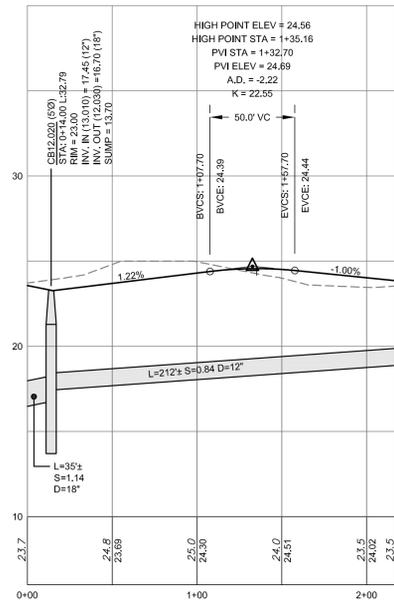


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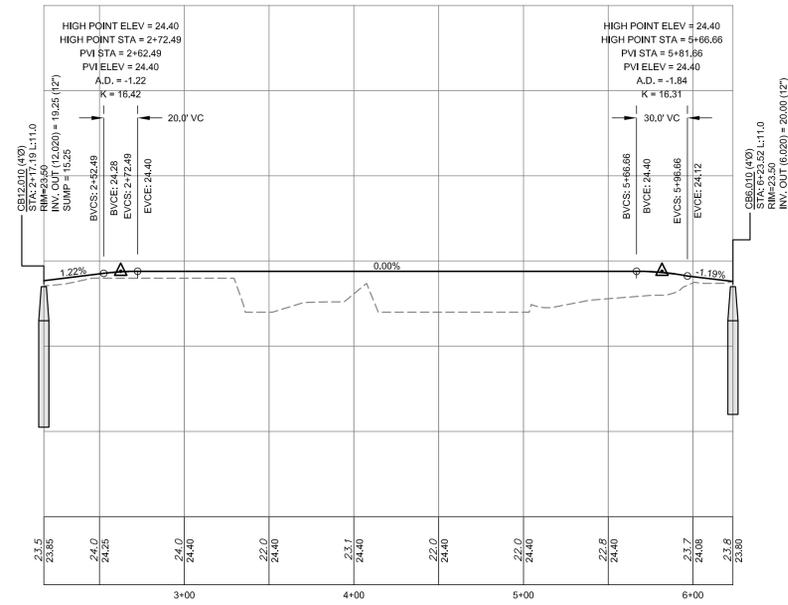
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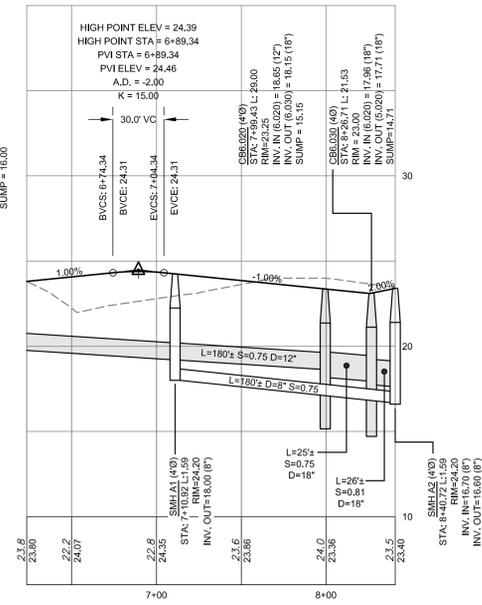
RESIDENTIAL ACCESS ROAD 3 PROFILE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



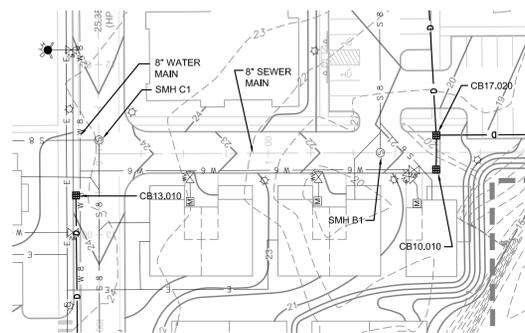
RESIDENTIAL ACCESS ROAD 4 (SEC 1) PROFILE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



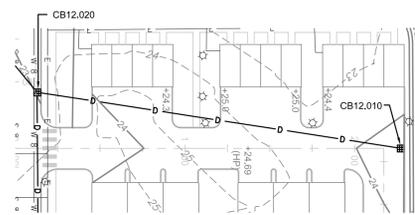
RESIDENTIAL ACCESS ROAD 4 (SEC 2) PROFILE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



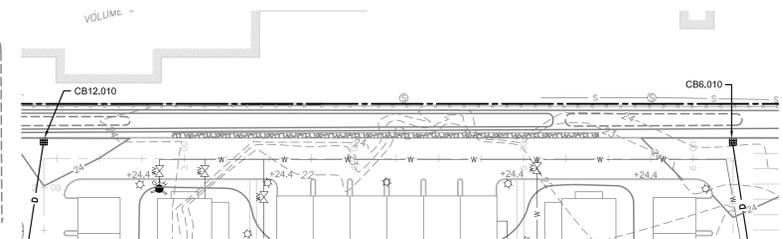
RESIDENTIAL ACCESS ROAD 4 (SEC 3) PROFILE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



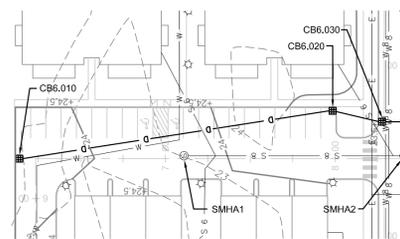
RESIDENTIAL ACCESS ROAD 3 PLAN
SCALE: 1" = 50'



RESIDENTIAL ACCESS ROAD 4 (SEC 1) PLAN (PRIVATE)
SCALE: 1" = 50'



RESIDENTIAL ACCESS ROAD 4 (SEC 2) PLAN (PRIVATE)
SCALE: 1" = 50'



RESIDENTIAL ACCESS ROAD 4 (SEC 3) PLAN (PRIVATE)
SCALE: 1" = 50'

NOTES:

- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

3	SUBMISSION REVISIONS	23FEB22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	
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Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV 23FEB22

Project Title:
"EAST POINT"
MAP 203 BLOCK 13 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND

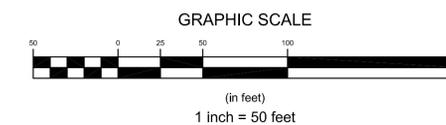
Client/Owner:
NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903

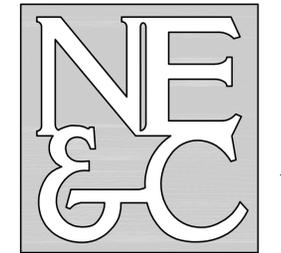
Issued for:
PERMITTING

Drawing Title:
ROAD PROFILE
SHEET 4
(RESIDENTIAL ACCESS ROADS 3 & 4)

Drawing Number: **C-17**
Sheet **17** of **23**
Project Number: **20072.0**
Survey Index: -

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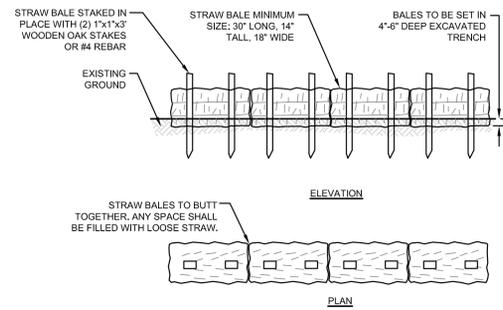


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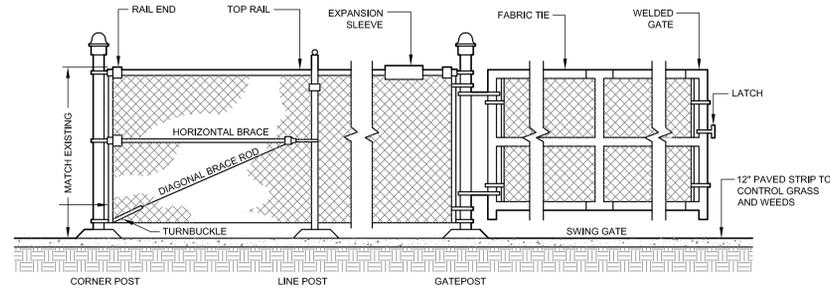
SITE/CIVIL
LAND PLANNING
WATERFRONT
SURVEYING
GEOTECHNICAL
ENVIRONMENTAL
TRANSPORTATION
STRUCTURAL

RECEIVED
MARCH 1, 2022
CIVIL ENGINEERING
MANAGEMENT BOARD



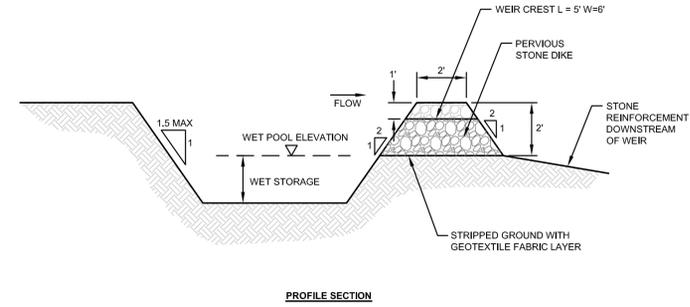
- NOTES:**
1. BALE WEIGHT SHALL NOT BE LESS THAN 50 LBS AND SHALL BE BOUND WITH NO LESS THAN TWO STRINGS OR WIRES CONTAINING A MINIMUM OF FIVE (5) CUBIC FEET OF MATERIAL. MINIMUM DIMENSIONS SHOWN IN DETAIL.
 2. STRAW BALES SHALL BE CERTIFIED AS BEING NOXIOUS WEED-FREE BALES. TO BE "CERTIFIED" MEANS THAT THE PRODUCT IS FREE OF ANY NOXIOUS WEEDS.
 3. STAKES SHALL BE DRIVEN THROUGH STAKES AT A SLIGHT UPSTREAM ANGLE TO PREVENT BALE FROM OVERTURNING.
 4. LOOSE STRAW SHALL BE WEDGED BETWEEN BALES AFTER INSTALLATION.
 5. MATERIAL EXCAVATED FROM TRENCH SHALL BE BACKFILLED, COMPACTED, AND STABILIZED.

BALED STRAW EROSION CONTROL BARRIER
SCALE: NOT TO SCALE

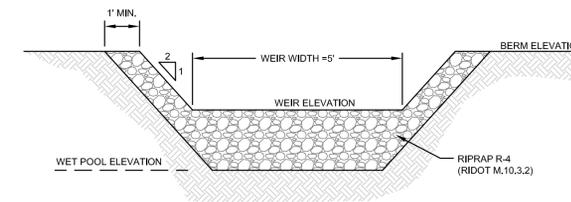


NOTE: FOR FENCES 5 FT AND TALLER, A HORIZONTAL OR DIAGONAL BRACE, OR BOTH, IS USED FOR GREATER STABILITY. POST SPACING SHOULD BE EQUIDISTANT AND SHOULD NOT EXCEED 10 FT O.C.

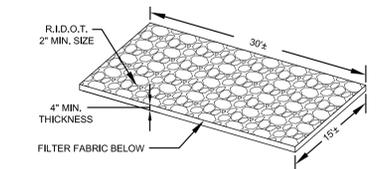
TYPICAL CHAIN LINK FENCE DETAIL
SCALE: NOT TO SCALE



PROFILE SECTION

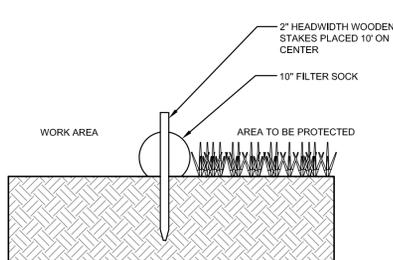


TYPICAL SEDIMENT TRAP DETAILS
SCALE: NOT TO SCALE

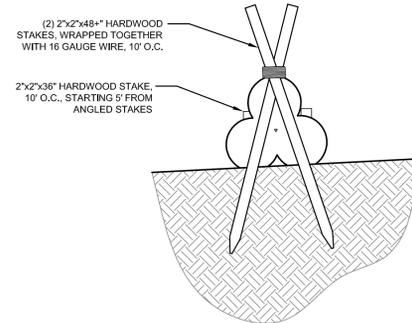


NOTE: ALL CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE CONTRACTOR'S DISCRETION PER DETAIL PROVIDED.

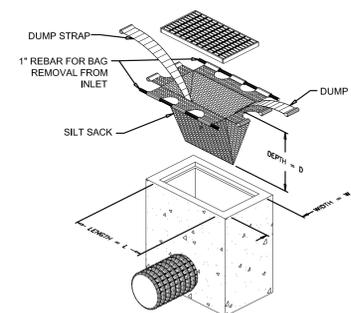
CONSTRUCTION ENTRANCE
SCALE: NOT TO SCALE



SECTION VIEW



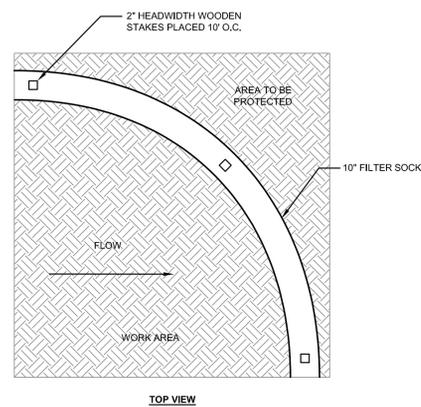
PYRAMID SECTION VIEW (FOR HIGH FLOW CONDITIONS)



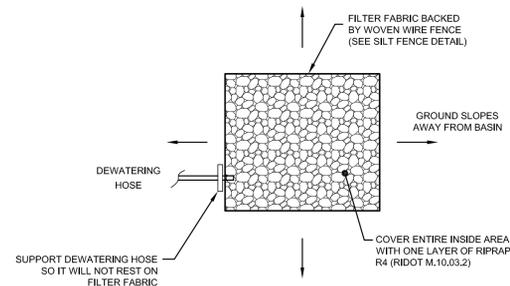
MAINTENANCE SCHEDULE:

1. EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT (>0.25\"/>
2. IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACKS SHALL BE INSPECTED EVERY 2-3 WEEKS.
3. THE YELLOW RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

SILT SACK DETAIL
SCALE: NOT TO SCALE



10\"/>



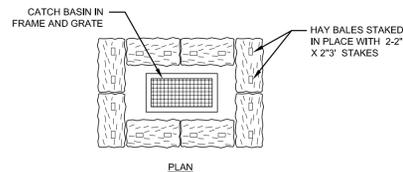
DEWATERING BASIN
SCALE: NOT TO SCALE



CROSS SECTION

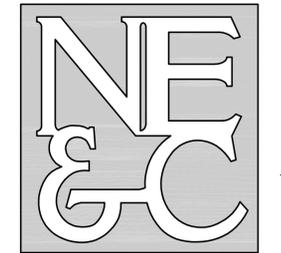
- NOTES:**
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
 2. ANCHORING THE BLANKET IN A 6\"/>
 3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2\"/>
 5. WHEN BLANKETS MUST BE SPICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6\"/>

EROSION CONTROL BLANKET
SCALE: NOT TO SCALE



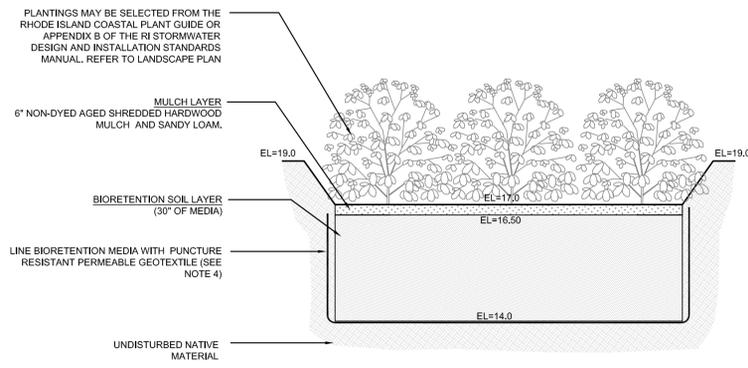
STRAW BALE INLET PROTECTION
SCALE: NOT TO SCALE

2	SUBMISSION REVISIONS	23FEB22	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV 23FEB22
Project Title:			
"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND			
Client/Owner:			
NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903			
Issued for:			
PERMITTING			
Drawing Title:			
PROPOSED DETAIL SHEET 1			
Drawing Number:		C-18	
Sheet		18 of 23	
Project Number:		20072.0	
Survey Index:		-	
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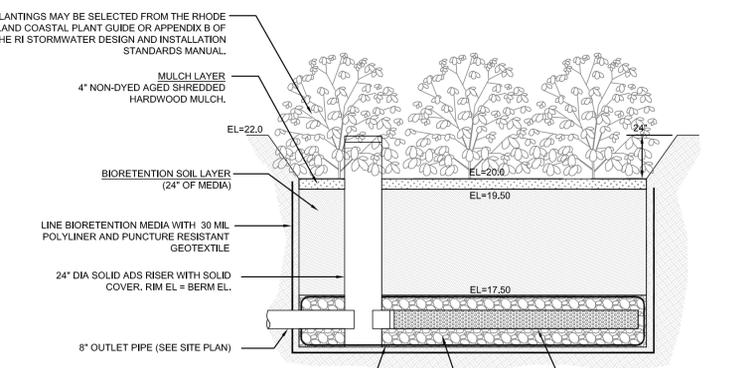


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BIORETENTION FILTER B-1



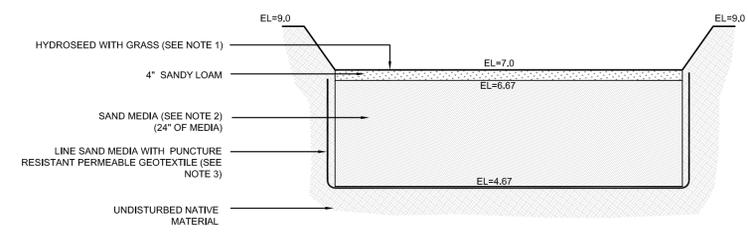
BIORETENTION FILTER B-3

NOTES:

- BIORETENTION FILTER PLANTINGS MAY BE SELECTED FROM THE RHODE ISLAND COASTAL PLANT GUIDE OR APPENDIX B OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL AND SHOULD BE SELECTED BY A REGISTERED RI LANDSCAPE ARCHITECT.
- PLANTINGS MUST BE DENSE AND COVER THE ENTIRETY OF THE FILTER SURFACE.
- BIORETENTION SOIL SHALL CONSIST OF USDA LOAMY SAND AND MEET THE FOLLOWING GRADATIONS: SAND 85-88% SILT 8-12%, CLAY 0-2%, AND ORGANIC MATTER (LEAF COMPOST) 3-5%.
- UNDERDRAIN STONE SHALL BE WASHED CLEAN CRUSHED STONE. STONE PIPE TO BE WRAPPED IN GEOTEXTILE FABRIC CONFORMING TO FLOWRATE IN NOTE 5.
- POLYLINERS SHALL BE 30 MIL IN THICKNESS (ASTM D 751), SHALL HAVE A TENSILE STRENGTH OF 1,100 LBS AND AN ELONGATION OF 200% (ASTM D 412) A TEAR RESISTANCE OF 150 LBSIN (ASTM D 624) AND WATER ADSORPTION OF +8 TO -2% MASS (ASTM D 471). LINER SHALL BE ULTRAVIOLET RESISTANT. GEOTEXTILE FABRICS SHALL HAVE A PUNCTURE STRENGTH OF 125 LBS, A BURST STRENGTH OF 400 PSI (ASTM D 1117) AND A TENSILE STRENGTH OF 300 LBS (ASTM D 1682). FABRIC SHALL BE MIN 0.08" THICK WITH AN EQUIVALENT OPENING SIZE OF #80 SIEVE AND A MINIMUM FLOW RATE OF 125 GPM PER SQUARE FOOT.
- UNDERDRAIN SHALL BE SCHEDULE 40 PVC PIPE CONFORMING TO ASTM D-1785 OR AASHTO M-278. PERFORATIONS SHALL BE 3/8" @ 6" ON CENTER. PIPE SHALL HAVE 3" OF STONE COVER.

BIORETENTION FILTER SECTIONS

SCALE: NOT TO SCALE



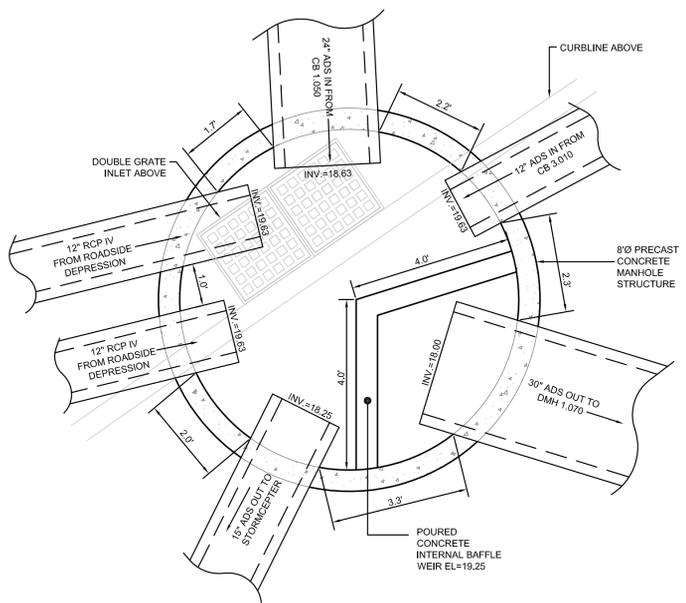
SAND FILTER B-2

SAND FILTER NOTES:

- SAND FILTER SHALL BE PLANTED WITH NEW ENGLAND WETMX (WETLAND SEED MIX) BY NEW ENGLAND WETLAND PLANTS, INC. OR APPROVED EQUAL.
- SAND FILTER SAND TO BE CLEAN AASHTO M-6 OR ASTM C-33 CONCRETE SAND (0.02" TO 0.04"). SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO ROCK DUST CAN BE USED AS SAND.
- PERMEABLE GEOTEXTILE FABRIC SHALL HAVE A PUNCTURE STRENGTH OF 125 LBS, A BURST STRENGTH OF 400 PSI (ASTM D 1117) AND A TENSILE STRENGTH OF 300 LBS (ASTM D 1682). FABRIC SHALL BE MIN 0.08" THICK WITH AN EQUIVALENT OPENING SIZE OF #80 SIEVE AND A MINIMUM FLOW RATE OF 125 GPM PER SQUARE FOOT.

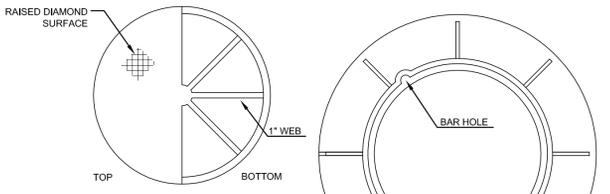
SAND FILTER SECTION

SCALE: NOT TO SCALE

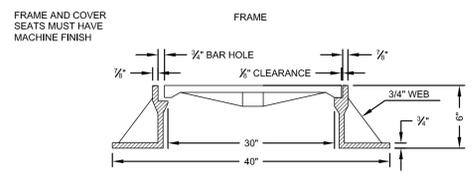


CB1.060 DIVERSION STRUCTURE PLAN VIEW DETAIL

SCALE: 1"=2'

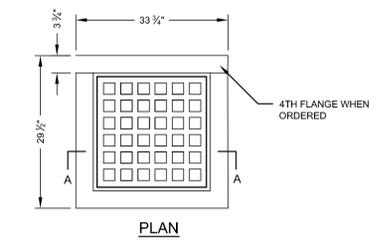


COVER SECTION

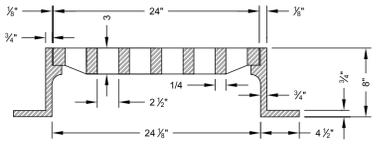


ROUND FRAME AND COVER

SCALE: NOT TO SCALE



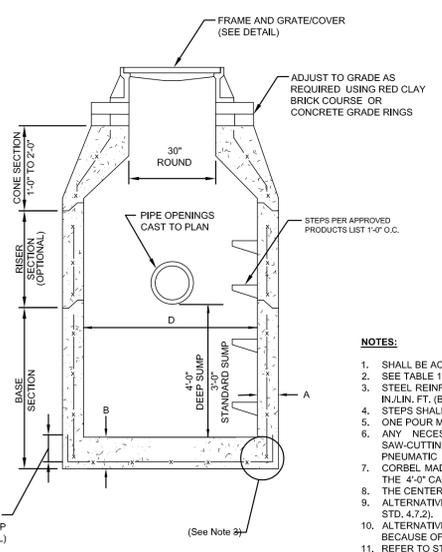
PLAN



SECTION A-A

SQUARE FRAME AND GRATE (RIDOT 6.3.0)

SCALE: NOT TO SCALE



CATCH BASIN DIAMETER (D)	A	B	CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED*
4'-0"	5"	6"	0.12 SQ. IN./LIN. FT.
5'-0"	6"	7"	0.15 SQ. IN./LIN. FT.
6'-0"	7"	8"	0.18 SQ. IN./LIN. FT.
8'-0"	9"	8"	REFER TO MANUFACTURER

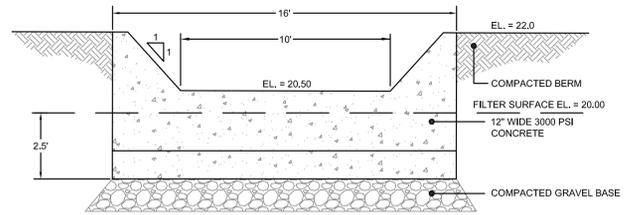
* FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

NOTES:

- SHALL BE ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATION.
- SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS.
- STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
- STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
- ONE POUR MONOLITHIC BASE SECTION.
- ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
- CORBEL MADE OF RED CLAY BRICK WILL BE PERMITTED FOR THE "CONE SECTION" OF THE 4'-0" CATCH BASIN ONLY.
- THE CENTERLINE OF THE OPENING MUST BE WITHIN 2'-0" FROM THE STEPS.
- ALTERNATIVE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
- ALTERNATIVE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
- REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

PRECAST ROUND CATCH BASIN & DRAIN MANHOLE (RIDOT 4.4.0)

SCALE: NOT TO SCALE



BIORETENTION B-3 CONCRETE OUTLET WEIR DETAIL

SCALE: NOT TO SCALE

3	SUBMISSION REVISIONS	23FEB22	
2	SEWER REVISIONS	31JAN22	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV 23FEB22

Project Title:
"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND

Client/Owner:
NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903

Issued for:
PERMITTING

Drawing Title:
PROPOSED
DETAIL SHEET 2



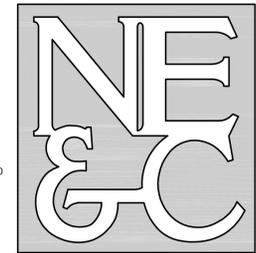
Drawing Number:
C-19

Sheet **19** of **23**

Project Number:
20072.0

Survey Index:
-

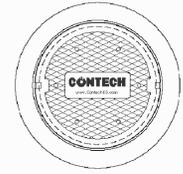
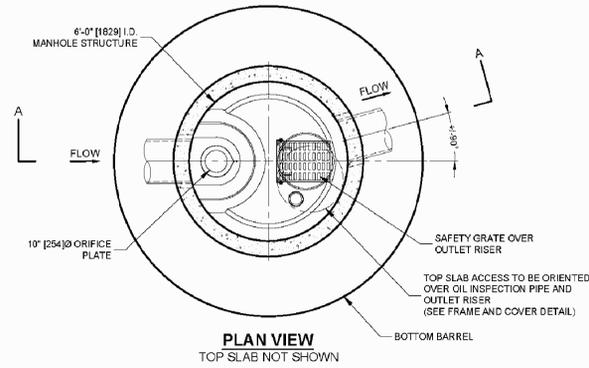
OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.



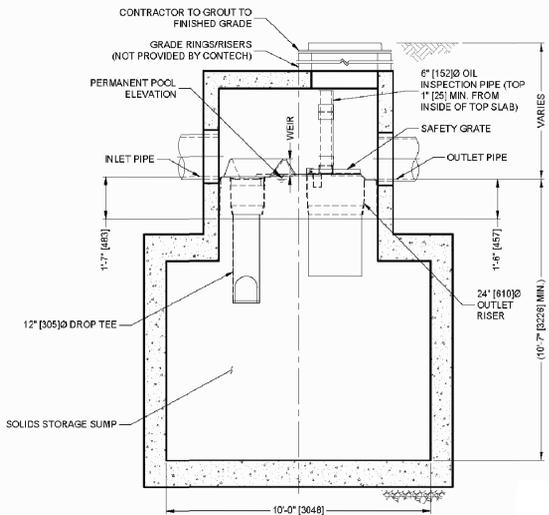
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 LAND PLANNING
 WATERFRONT
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 ENVIRONMENTAL
 TRANSPORTATION
 STRUCTURAL



FRAME AND COVER
 (MAY VARY)
 NOT TO SCALE

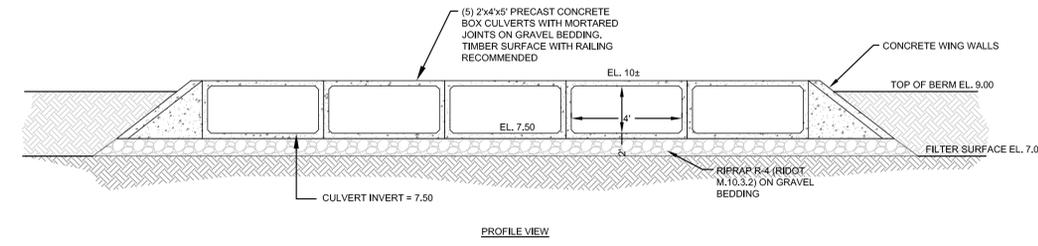


SECTION A-A

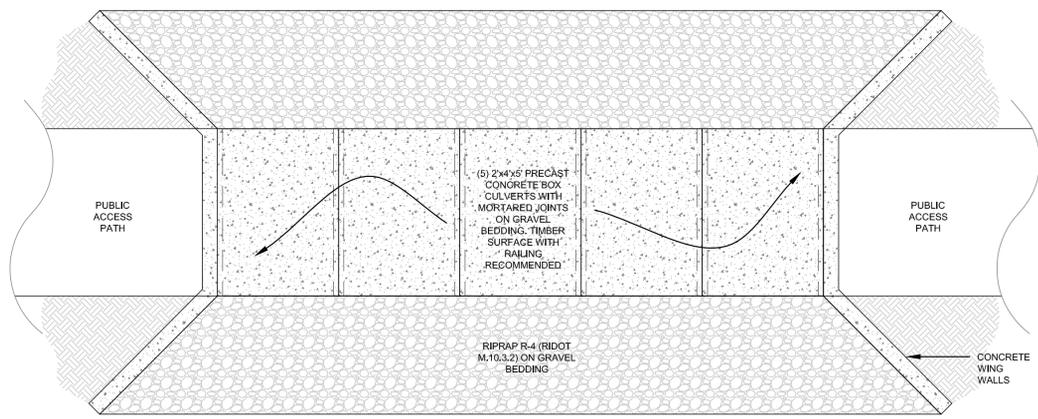
STORMCEPTOR STC4800 STANDARD DETAIL (BIORETENTION B-1 PRETREATMENT)
 SCALE: NOT TO SCALE

NOTES
 TECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT. PLEASE CONTACT YOUR CONTECH ENGINEERED UTENSILS REPRESENTATIVE. WWW.CONTECH.COM
 STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 STORMCEPTOR STRUCTURE SHALL MEET AASHTO H20 LOAD RATING. ASSUMING EARTH COVER OF 0' - 2' (610) AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
 STINGS SHALL MEET AASHTO M308 AND BE CAST WITH THE CONTECH LOGO.
 STORMCEPTOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD. TERMINATE UNITS ARE SHOWN IN MILLIMETERS (mm).

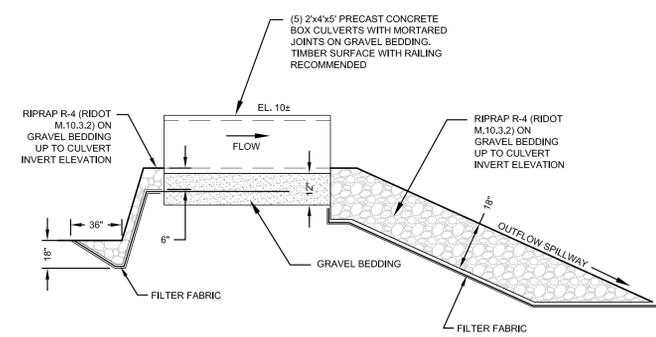
INSTALLATION NOTES
 1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMCEPTOR MANHOLE STRUCTURE.
 3. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 5. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



PROFILE VIEW

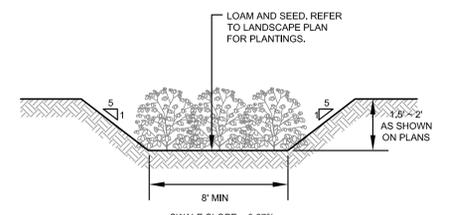


TOP VIEW



SECTION VIEW

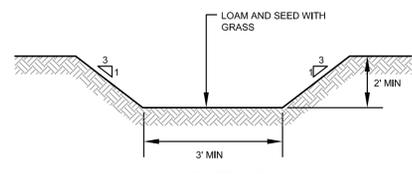
SAND FILTER B-2 OVERFLOW WEIR DETAILS
 SCALE: NOT TO SCALE



SWALE SLOPE = 0.67%

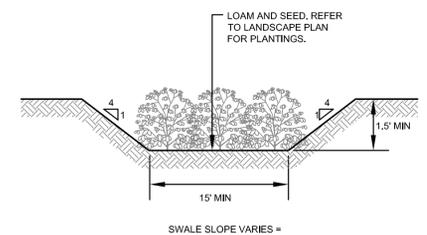
NOTE: PLANTINGS MAY BE SELECTED FROM THE RHODE ISLAND COASTAL PLANT GUIDE OR APPENDIX B OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL. REFER TO LANDSCAPE PLAN.

SWALE 1: (VEGETATED DRY) CROSS SECTION
 SCALE: NOT TO SCALE



SWALE SLOPE = 1.08%

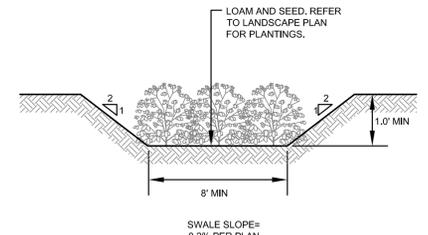
SWALE 2: (GRASS) CROSS SECTION
 SCALE: NOT TO SCALE



SWALE SLOPE VARIES = 1%-1.3% PER PLAN

NOTE: PLANTINGS MAY BE SELECTED FROM THE RHODE ISLAND COASTAL PLANT GUIDE OR APPENDIX B OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL. REFER TO LANDSCAPE PLAN.

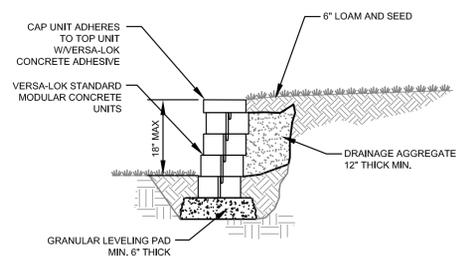
SWALE 3: (VEGETATED DRY) CROSS SECTION
 SCALE: NOT TO SCALE



SWALE SLOPE = 0.2% PER PLAN

NOTE: PLANTINGS MAY BE SELECTED FROM THE RHODE ISLAND COASTAL PLANT GUIDE OR APPENDIX B OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL. REFER TO LANDSCAPE PLAN.

SWALE 4: (VEGETATED DRY) CROSS SECTION
 SCALE: NOT TO SCALE



TYPICAL WALL SECTION @ PARKING LOT ADJACENT TO RAILWAY
 SCALE: NOT TO SCALE

3	SUBMISSION REVISIONS	23FEB22	
2	RAILROAD REVISIONS	13DEC21	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV 23FEB22

Project Title:
"EAST POINT"
 MAP 203 BLOCK 1 LOT 4
 MAP 303 BLOCK 13 LOTS 4 & 5
 ROGER WILLIAMS AVENUE
 EAST PROVIDENCE
 RHODE ISLAND

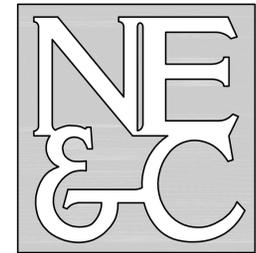
Client/Owner:
 NOBLE DEVELOPMENT, LLC
 10 GREEN STREET
 PROVIDENCE, RI 02903

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 PERMITTING

Drawing Title:
PROPOSED
 DETAIL SHEET 3

	Drawing Number:	C-20
	Sheet	20 of 23
	Project Number:	20072.0
	Survey Index:	-

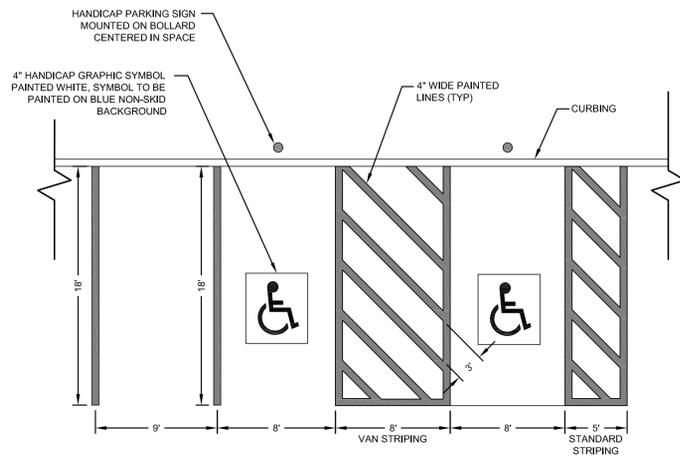
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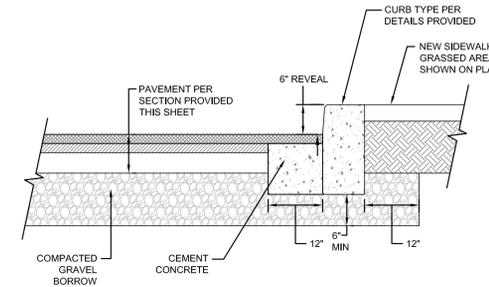
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PARKING STALL STRIPING
SCALE: NOT TO SCALE

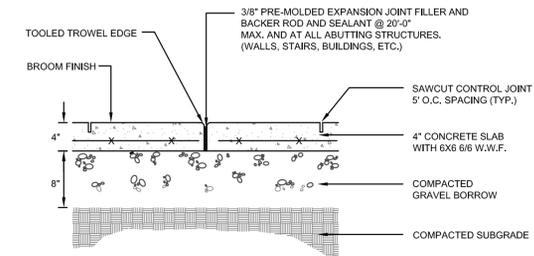
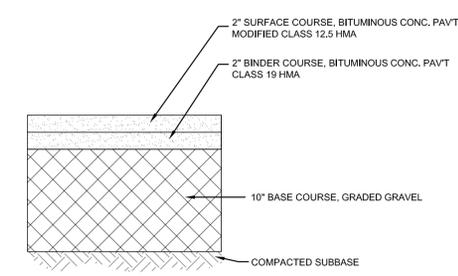


CURB SETTING DETAIL
SCALE: NOT TO SCALE

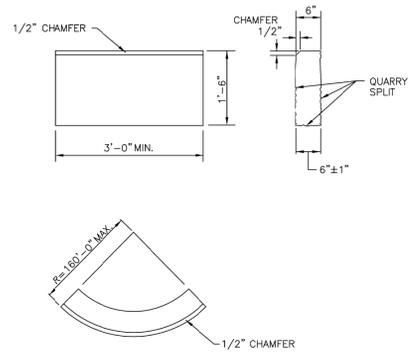
GRADED GRAVEL SPECIFICATIONS

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT PASSING
2 INCH	100
1.5 INCH	---
1 INCH	55-85
3/4 INCH	50-80
NO. 4	30-60
NO. 40	10-30
NO. 200	3-10
CLAY (FINES)	0-3

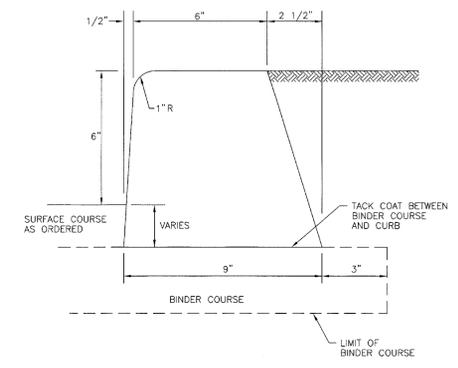
TYPICAL BITUMINOUS PAVEMENT SECTION
SCALE: NOT TO SCALE



CONCRETE WALKWAY SECTION
SCALE: NOT TO SCALE

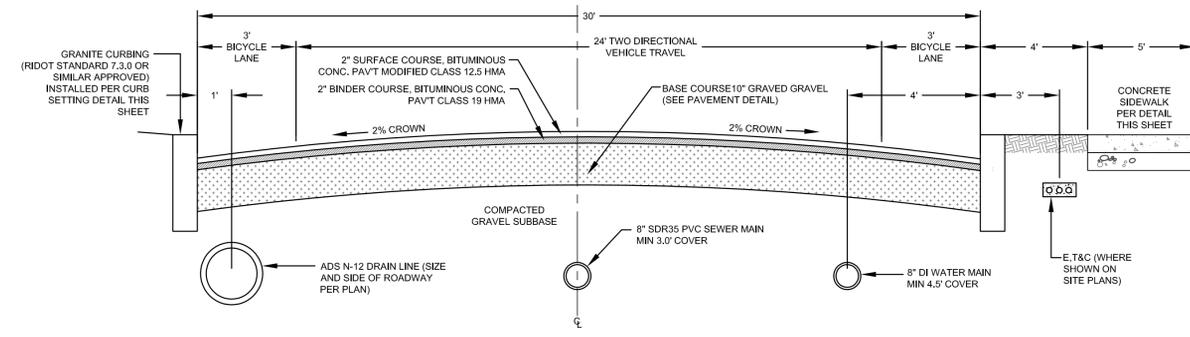


CIRCULAR CURB

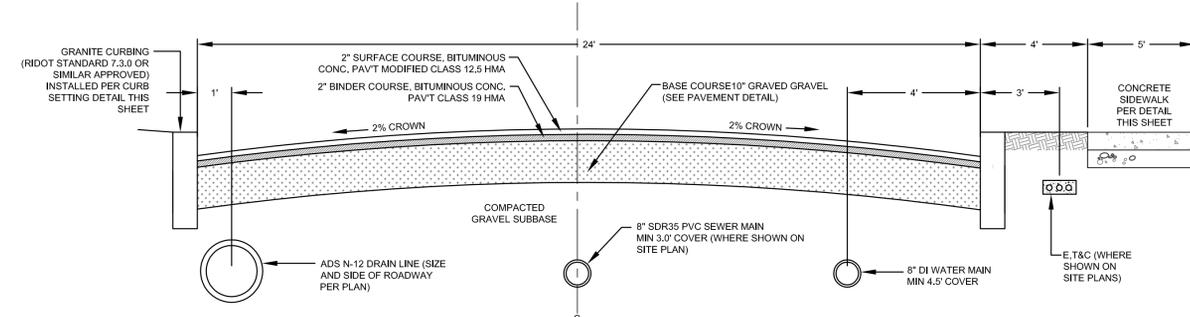


NOTE: SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.

BITUMINOUS CURB (RESIDENTIAL ACCESS ROADS & PARKING AREAS) RIDOT STD 7.5.0
SCALE: NOT TO SCALE

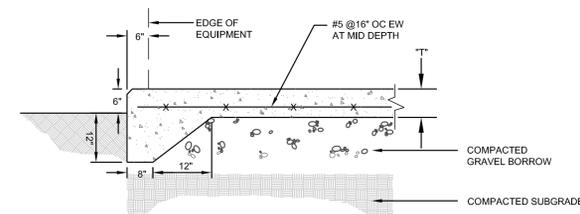


ROAD SECTION (30' WIDE MAIN ROAD)
SCALE: NOT TO SCALE



ROAD SECTION (24' RESIDENTIAL ACCESS ROADS 2 & 3)
SCALE: NOT TO SCALE

GRANITE CURB (PUBLIC ROADS ONLY) RIDOT STD 7.3.0
SCALE: NOT TO SCALE



NOTE: IF LENGTH OR WIDTH EXCEEDS 8'-0" THEN "T" = 8", OTHERWISE "T" = 6"

TYPICAL EXTERIOR EQUIPMENT PAD SECTION
SCALE: NOT TO SCALE



3	SUBMISSION REVISIONS	23FEB22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
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Checked by:	GES	Date:	REV 23FEB22

Project Title:
**"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND**

Client/Owner:
**NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903**

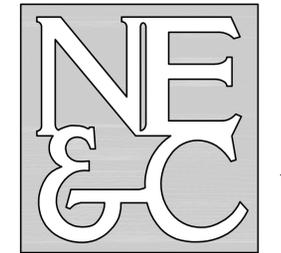
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Drawing Number:
C-21
Sheet **21** of **23**
Project Number:
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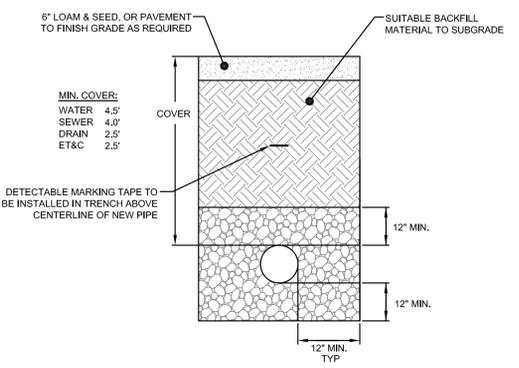
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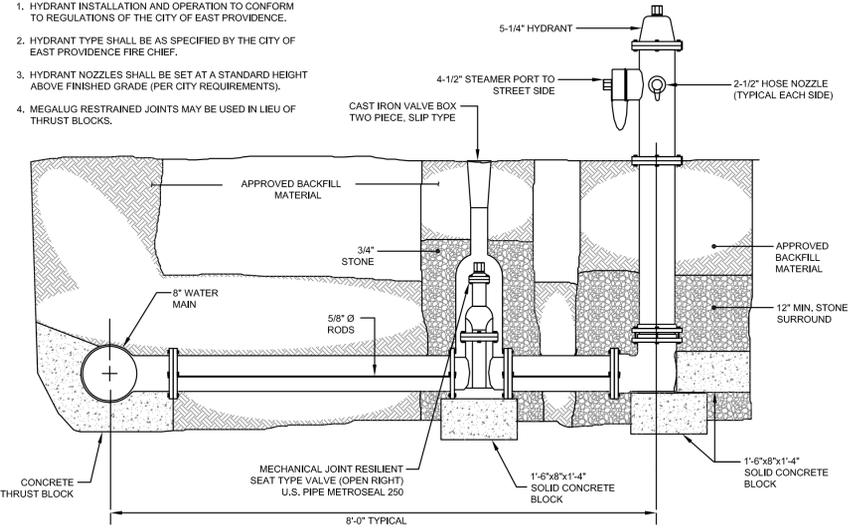
- SITE/CIVIL
- LAND PLANNING
- WATERFRONT
- SURVEYING
- GEOTECHNICAL
- ENVIRONMENTAL
- TRANSPORTATION
- STRUCTURAL



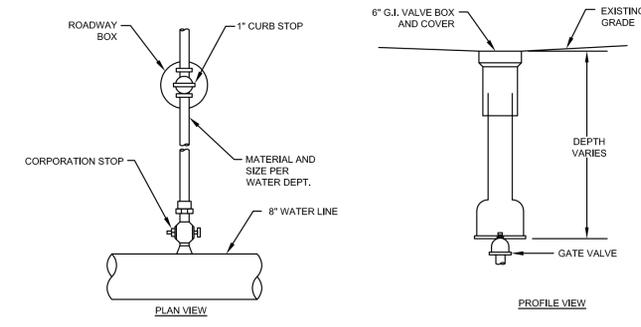
UTILITY TRENCH DETAIL
SCALE: NOT TO SCALE

- NOTES:**
- UNSUITABLE MATERIAL SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 12-INCHES BELOW THE DESIGN INVERT ELEVATION.
 - TRENCH PROTECTION SHALL BE REQUIRED IN ACCORDANCE WITH OSHA REGULATIONS, AND AS OTHERWISE REQUIRED TO PROTECT UTILITIES, ROADWAYS, AND ADJACENT STRUCTURES.
 - SEWER AND DRAIN PIPES SHALL BE LAID BEGINNING AT THE DOWNSTREAM END OF THE PIPE LINE.
 - ALL PVC SEWER PIPES SHALL BE IPEX RING-TITE SDR 35, OR SIMILAR APPROVED.
 - ALL DRAIN PIPES SHALL BE ADS N-12 TYPE IB (SOILTIGHT) UNLESS OTHERWISE INDICATED.
 - ALL SEWER PIPE AND GASKETS SHALL CONFORM TO ASTM 3034 AND ASTM F679.
 - ALL NEW SEWER MANHOLES SHALL HAVE KOR-N-SEAL CONNECTIONS, TYPICAL OR EQUAL.
 - BACKFILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED 12" IN HEIGHT WHEN INSTALLED UNDER LANDSCAPED AREAS ONLY. INSTALLATIONS UNDER PAVEMENT REQUIRE BACKFILL MATERIAL TO BE PLACED IN LAYERS NOT TO EXCEED 6" IN HEIGHT. THESE LAYERS SHALL BE COMPACTED TO 95% MAXIMUM DENSITY (ASHSTO T190). SUITABLE BACKFILL SHALL BE FREE OF LOAM, CLAY, ORGANIC MATTER AND PARTICLES LARGER THAN 2 INCHES IN DIAMETER.
 - SEWER AND DRAINAGE PIPE TRENCHES SHALL BE BEDDED WITH CRUSHED STONE OR SCREENED GRAVEL, THESE MATERIALS MUST CONFORM TO RIDOT STANDARD M.01.09 TYPE II MATERIAL.
 - WATER PIPE TRENCHES MUST BE BEDDED WITH SAND CONTAINING NO PARTICLES LARGER THAN 3/8". THIS MATERIAL MUST CONFORM TO AASHTO M6 REQUIREMENTS.
 - UTILITY INSTALLATIONS SHALL CONFORM TO ALL REQUIREMENTS OF THE CITY OF EAST PROVIDENCE PUBLIC WORKS DEPARTMENT AND THE CITY ENGINEER.
 - WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, GAVE-INS AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT THEM FROM DAMAGE.

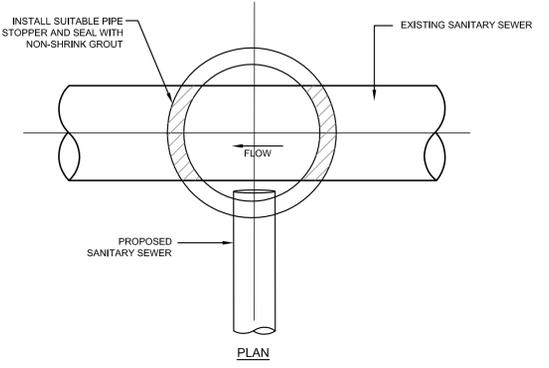
- HYDRANT NOTES**
- HYDRANT INSTALLATION AND OPERATION TO CONFORM TO REGULATIONS OF THE CITY OF EAST PROVIDENCE.
 - HYDRANT TYPE SHALL BE AS SPECIFIED BY THE CITY OF EAST PROVIDENCE FIRE CHIEF.
 - HYDRANT NOZZLES SHALL BE SET AT A STANDARD HEIGHT ABOVE FINISHED GRADE (PER CITY REQUIREMENTS).
 - MEGALUG RESTRAINED JOINTS MAY BE USED IN LIEU OF THRUST BLOCKS.



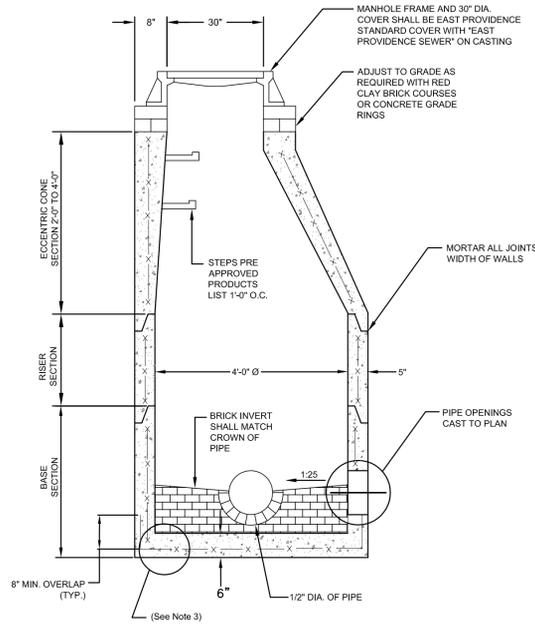
HYDRANT DETAIL
SCALE: NOT TO SCALE



WATER GATE VALVE/SERVICE CURB STOP
SCALE: NOT TO SCALE

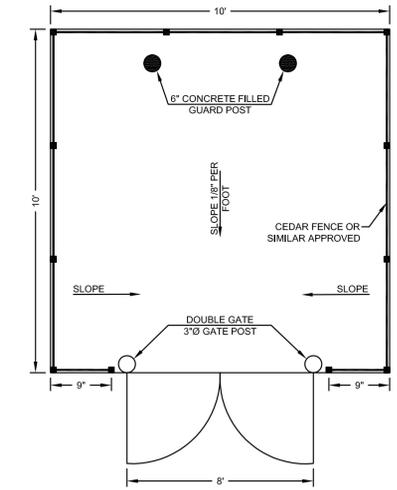


DOGHOUSE MANHOLE
SCALE: NOT TO SCALE

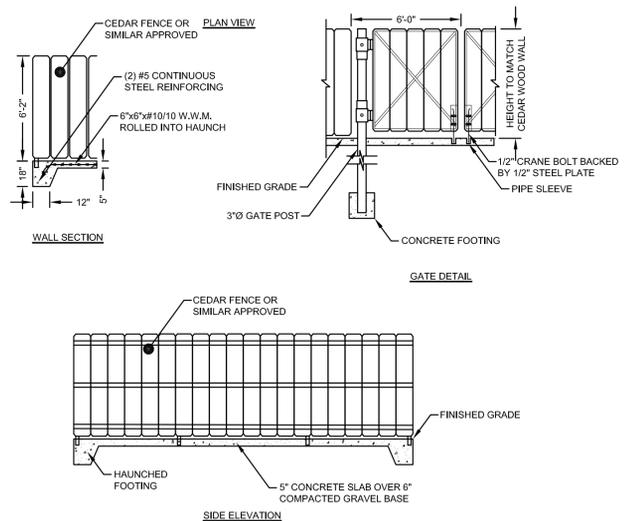


PRECAST SEWER MANHOLE DETAIL (RIDOT 4.2.0)
SCALE: NOT TO SCALE

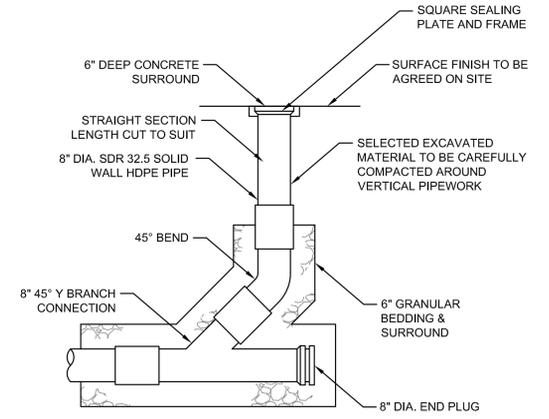
- NOTES:**
- SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
 - CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.12 SQ. IN./LIN.FT. MINIMUM.
 - STEEL REINFORCEMENT FOR BASE SECTION SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT (BOTH WAYS).
 - ONE POUR MONOLITHIC BASE SECTION.
 - ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
 - STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
 - ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
 - ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
 - REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.
 - BENCHING TO SLOPE AT NOT LESS THAN 1:30, NOT MORE THAN 1:12.



SEWER CLEANOUT DETAIL
SCALE: NOT TO SCALE



TYPICAL TRASH ENCLOSURE
FINAL SIZING OF THE ENCLOSURES TO BE DETERMINED ARCHITECT MAY PROVIDE ALTERNATE DESIGN
SCALE: NOT TO SCALE



SQUARE SEALING PLATE AND FRAME

3	SUBMISSION REVISIONS	23FEB22	
2	SUBMISSION REVISIONS	21JUN21	
1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV 23FEB22
Scale:	AS SHOWN	Date:	REV 23FEB22

"EAST POINT"
MAP 203 BLOCK 1 LOT 4
MAP 303 BLOCK 13 LOTS 4 & 5
ROGER WILLIAMS AVENUE
EAST PROVIDENCE
RHODE ISLAND

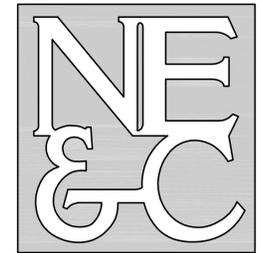
Client/Owner:
NOBLE DEVELOPMENT, LLC
10 GREEN STREET
PROVIDENCE, RI 02903

Issued for:
PERMITTING

Drawing Title:
**PROPOSED
DETAIL SHEET 5**

	Drawing Number:	C-22
	Sheet	22 of 23
	Project Number:	20072.0
	Survey Index:	-

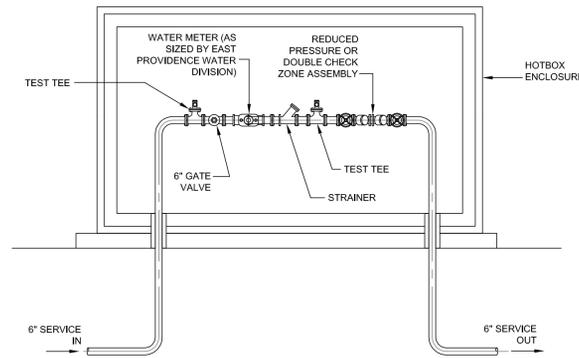
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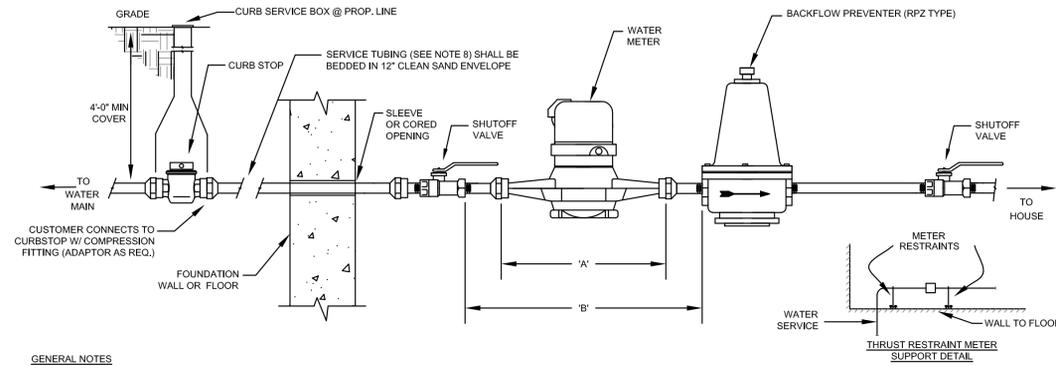
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TRANSPORTATION
STRUCTURAL



TYPICAL ABOVE GROUND WATER METER ENCLOSURE
SCALE: NOT TO SCALE

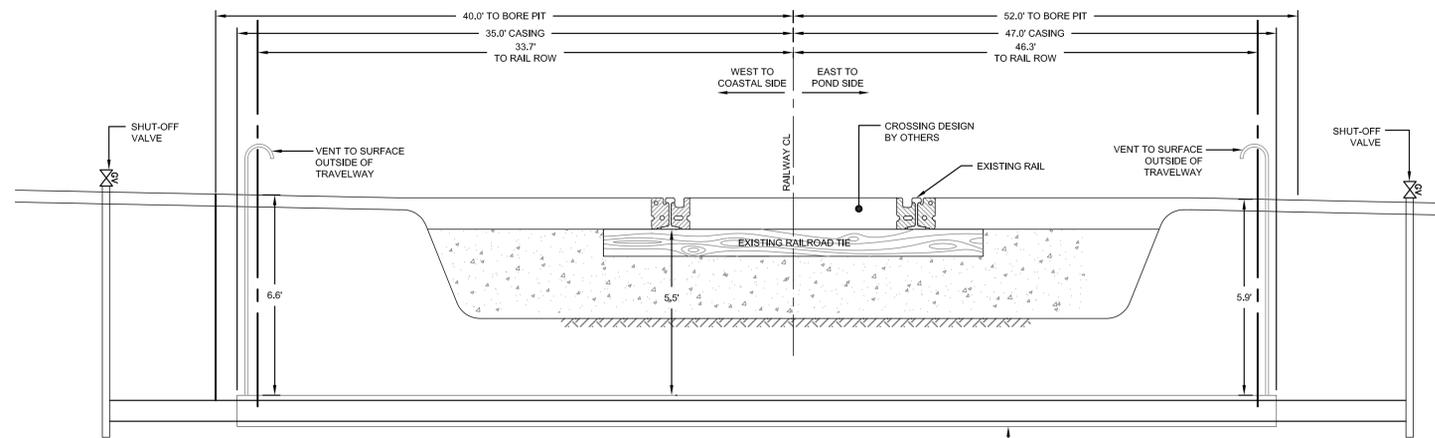


GENERAL NOTES

- METER IS FURNISHED AND INSTALLED BY EAST PROVIDENCE WATER. METER SHALL BE SET IN THE HORIZONTAL POSITION. DOMESTIC WATER SHALL BE 5/8" UNLESS OTHERWISE APPROVED.
- METER SHALL BE LOCATED IN AN ACCESSIBLE LOCATION AND AT THE POINT WHERE THE WATER SERVICE ENTERS THE STRUCTURE.
- THRUST RESTRAINTS COMPRISED OF THREADED RODS WITH SUITABLE CLAMPS AND ANCHORS SHALL BE INSTALLED TO ANCHOR THE WATER SERVICE TO THE FLOOR AND/OR WALL TO PREVENT MOVEMENT, AND TO SUPPORT THE METER.
- BACKFLOW PREVENTER IS REQUIRED FOR DOMESTIC SERVICES.
- CONNECTIONS PRIOR TO THE OUTLET SHUTOFF VALVE ARE PROHIBITED.
- ALL FITTING AND VALVES THROUGH THE OUTLET SHUTOFF VALVE SHALL BE BRASS OR BRONZE BODY. SOLDERED JOINTS ARE PROHIBITED.
- SERVICE TUBING SHALL HAVE STAINLESS STEEL INSERTS OF COMPATIBLE SIZE AND LENGTH AT EACH COMPRESSION FITTING.
- SERVICES 2 INCHES OR LESS IN DIAMETER SHALL BE TYPE K COPPER TUBING IN ACCORDANCE WITH AWWA STANDARD C-800. SERVICES OF THIS SIZE SHALL BE AT LEAST OF THIS MATERIAL TO THE WATER METER.

METER SETTING TABLE			
METER SIZE	METER SPACE 'A'	COUPLING IPS INCH	ASSEMBLY SPACE 'B'
5/8"	7-3/4"	1/2" 3/4"	12-1/4" 12-1/4"
3/4"	9-1/4"	3/4" 1"	13-1/2" 13-3/4"
1"	11"	1"	15-3/4"

TYPICAL SINGLE FAMILY RESIDENCE WATER SERVICE DETAIL
SCALE: NOT TO SCALE



RAILROAD UTILITY CROSSING SECTION
SCALE: NOT TO SCALE

UTILITY NOTES:

- THE WATER AND SEWER UTILITY CROSSINGS SHALL BE INSTALLED BY JACK AND BORE.
- BORE PITS SHALL BE PROTECTED WITH ADEQUATE SHEETING, BULKHEADS, AND SIDEWALLS TO PROTECT THE RAILROAD'S ROADBED, PROPER BARRICADES AND LIGHTS, IF NECESSARY, WILL BE SET AROUND THE PITS FOR POSITIVE PROTECTION.
- A RAILROAD INSPECTOR MUST BE PRESENT DURING THE ENTIRE INSTALLATION OF THE CASING PIPES. THE INSPECTOR WILL HAVE COMPLETE AUTHORITY OVER THE PROJECT ON THE RAILROAD'S RIGHT OF WAY.
- ALL CONSTRUCTION INSPECTION COSTS WILL THE RESPONSIBILITY OF THE CONTRACTOR.
- PIPELINE CASINGS SHALL BE THE DIAMETER AND THICKNESS AS SHOWN ON THE DETAILS. THE STEEL PIPE SHALL HAVE A SPECIFIED MINIMUM YIELD STRENGTH OF AT LEAST 35,000 PSI.
- ALL CASING PIPE JOINTS WILL BE WELDED IN ACCORDANCE WITH AISC SPECIFICATIONS, SECTION 1-7-2. ALL JOINT WELDS WILL BE FULL PENETRATION.
- CASING VENT PIPING SHALL BE SCH 40 PVC MINIMUM TWO (2) INCHES IN DIAMETER. VENT PIPES SHALL EXTEND NOT LESS THAN FOUR (4) FEET ABOVE GROUND SURFACE. TOP OF VENT PIPES SHALL BE FITTED WITH A DOWN-TURNED ELBOW, PROPERLY SCREENED.
- EACH END OF THE CASING PIPE SHALL BE SEALED WITH GROUT FILL. GROUT MATERIAL SHOULD CONSIST OF NON-SHRINK SAND CEMENT SLURRY.
- CARRIER PIPE MATERIAL:
WATER MAIN - DUCTILE IRON CLASS 52, CEMENT LINED
SEWER MAIN - 3" CLASS 200 SDR21
- THE CONTRACTOR SHALL PREPARE A BORE PLAN PRIOR TO COMMENCEMENT OF ANY INSTALLATION.

(2) 8" DI WATER MAINS IN 12" SLEEVES (3" O.C. HORIZONTAL SEPARATION) OR 3" CLASS 200 SDR21 PRESSURIZED SEWER FORCE MAIN IN 6" SLEEVE.



1	SUBMISSION REVISIONS	23FEB22	
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"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND			
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Sheet		23 of 23	
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